Algebra II
Lesson #4 Unit 10
Class Worksheet #4
For Worksheets #5 - #7

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The interest earned would be $100 using the simple interest formula.

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Compound Interest Formula

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In the same way, we can show that $P_3 =$

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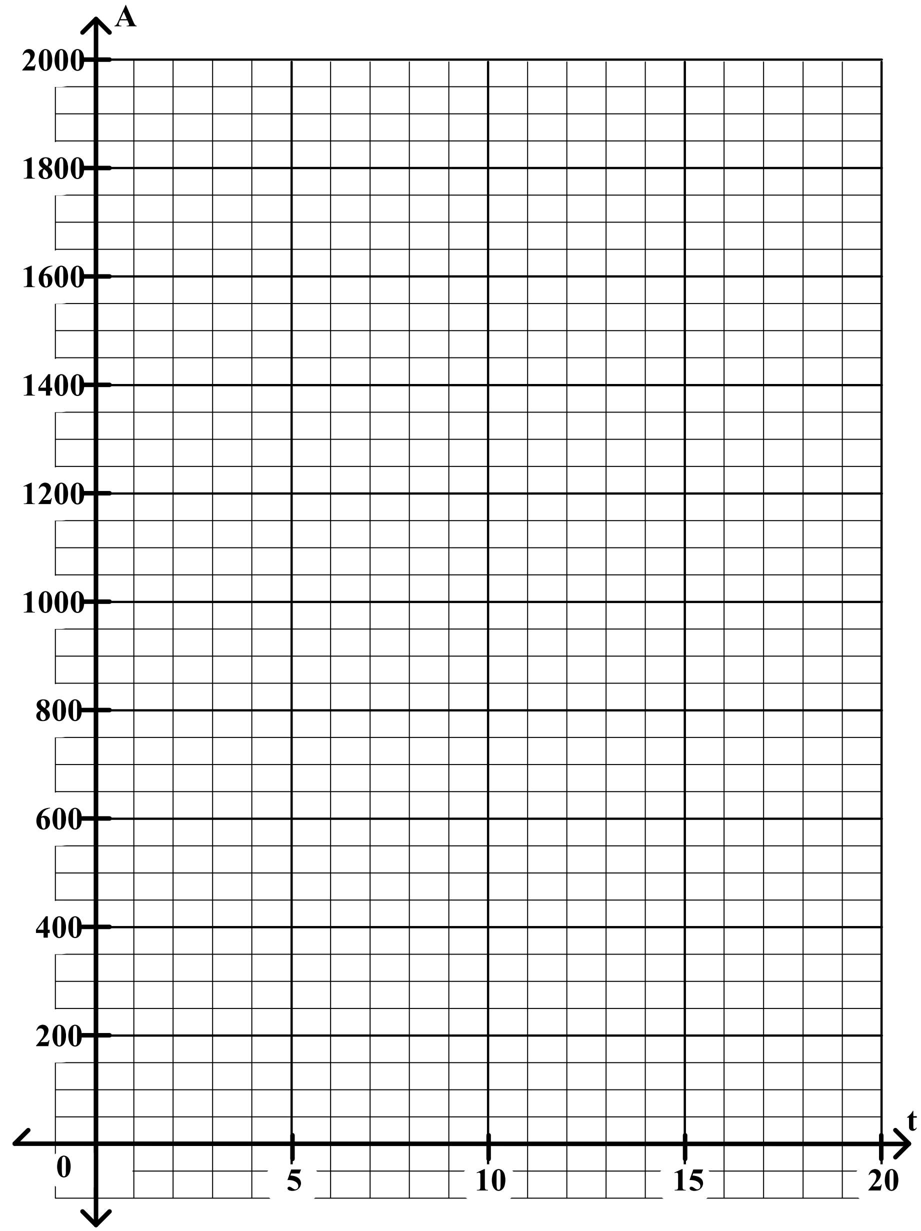

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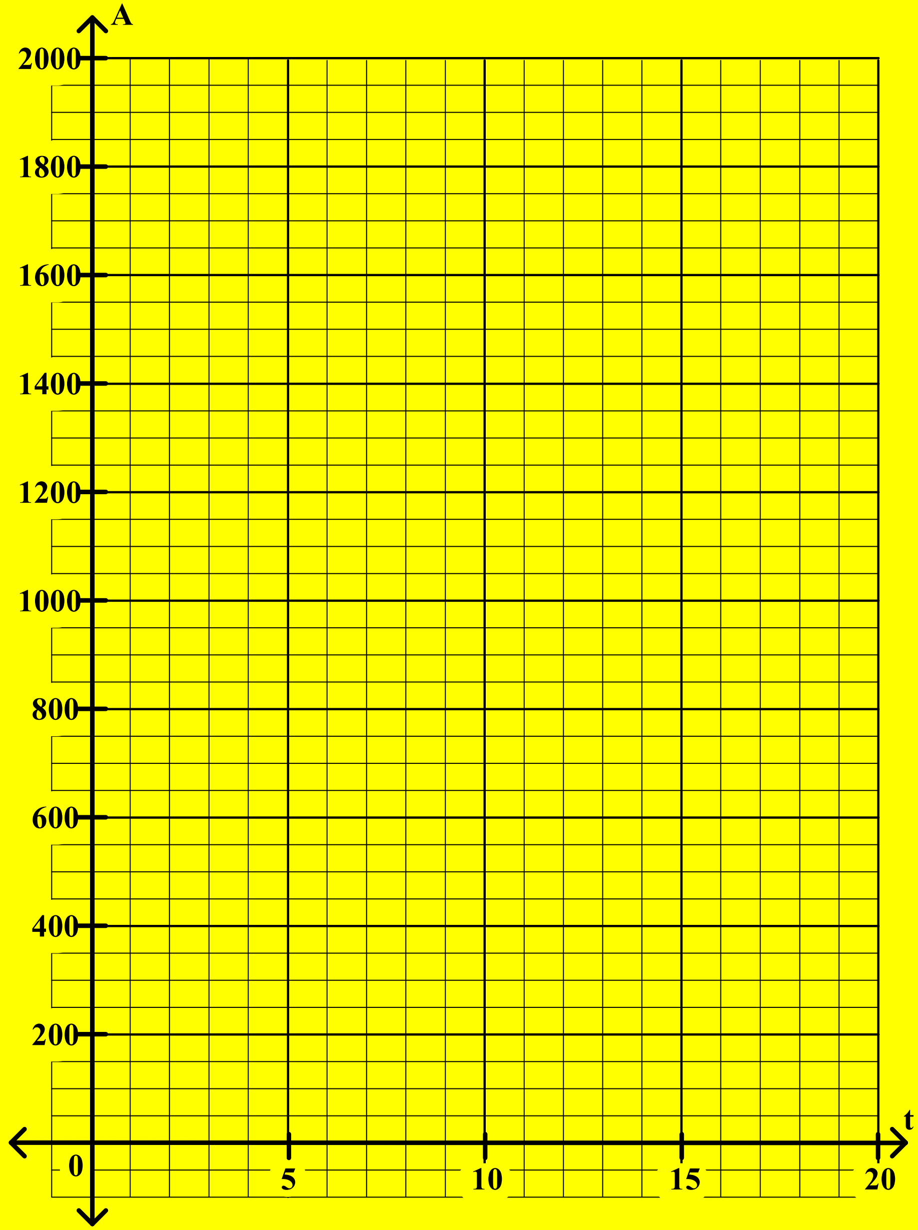

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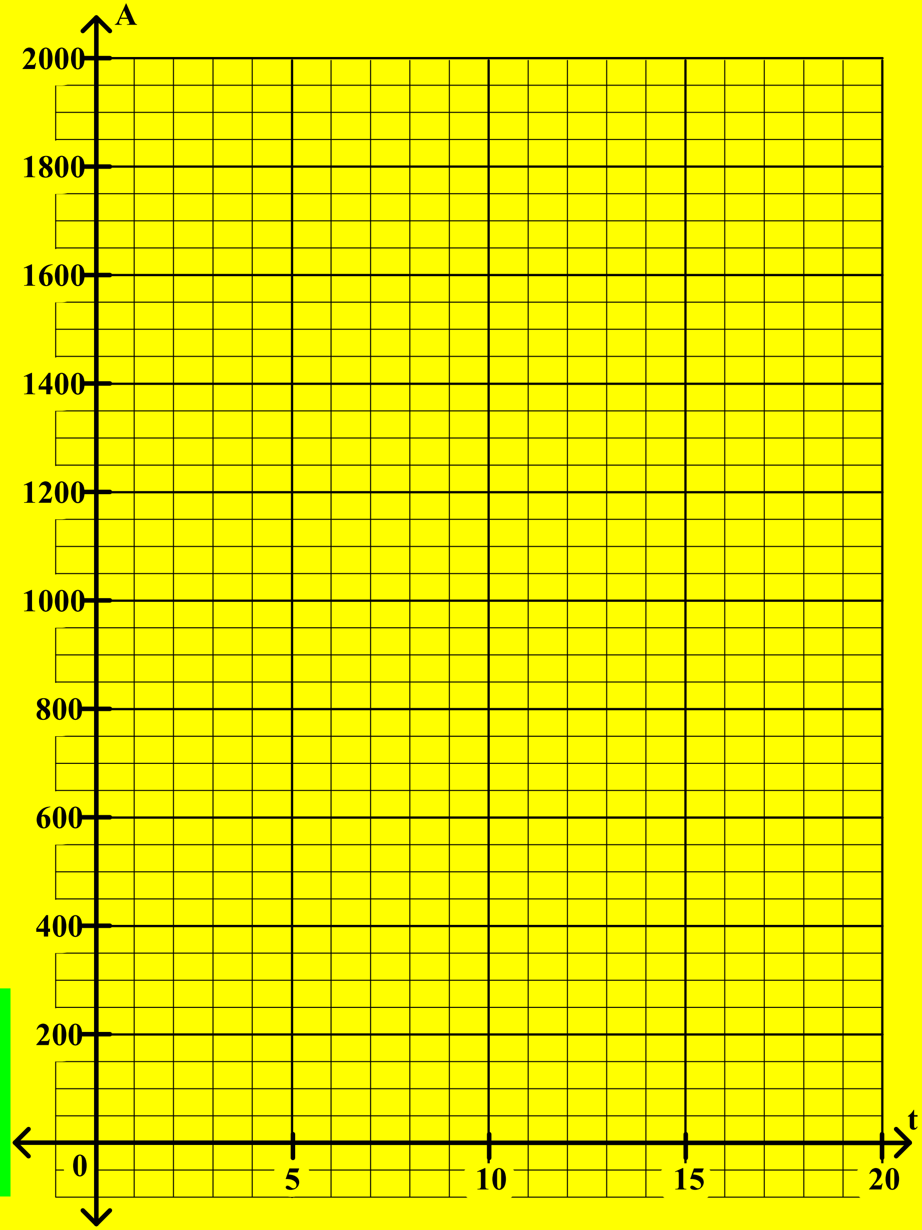

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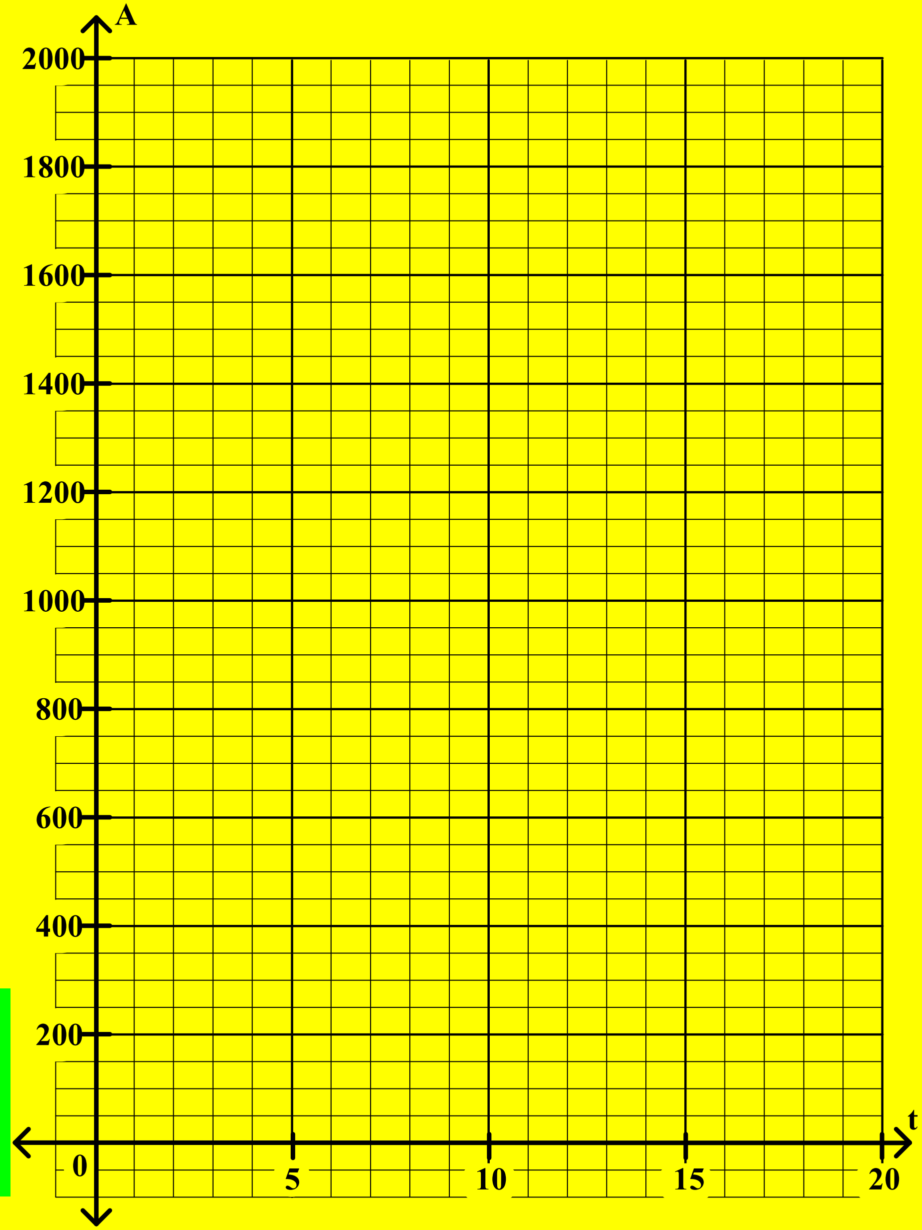

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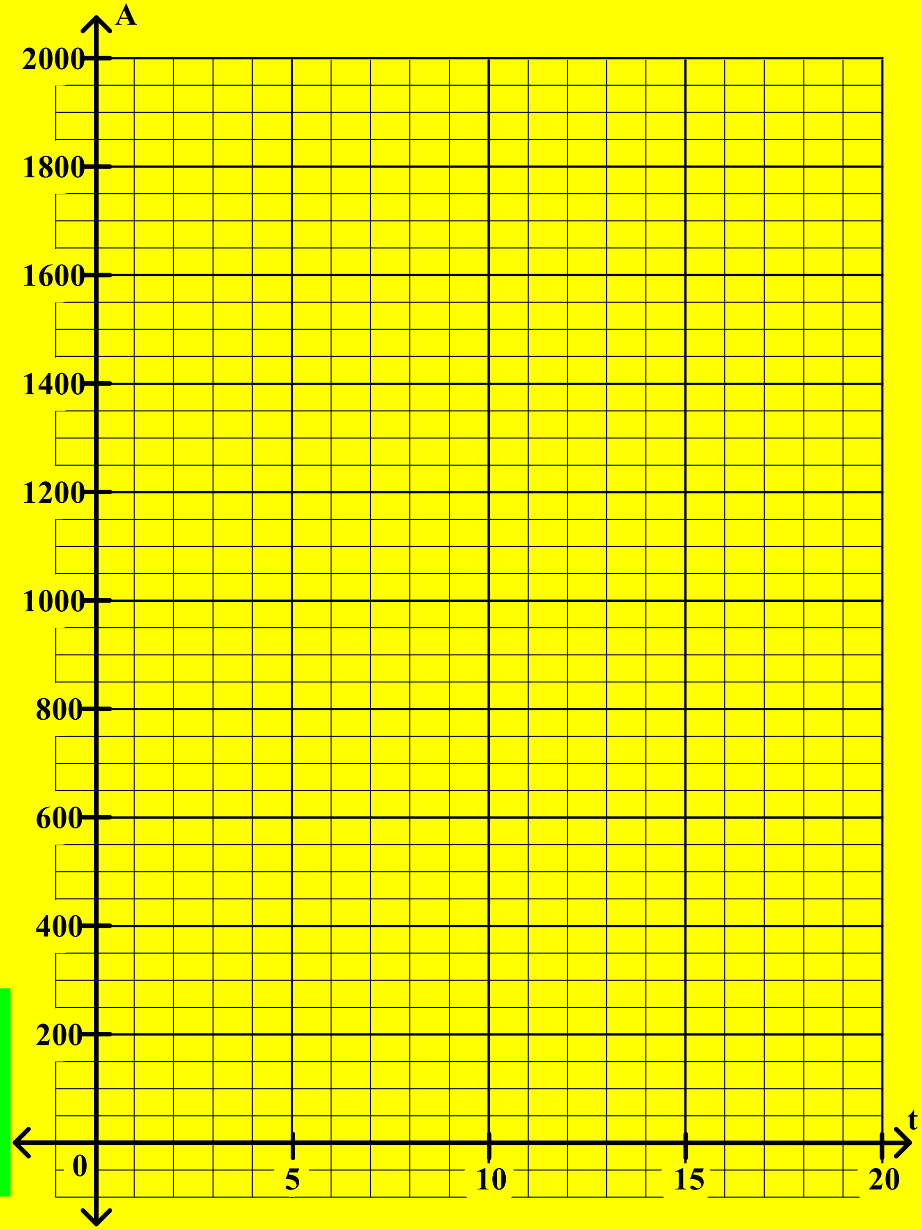

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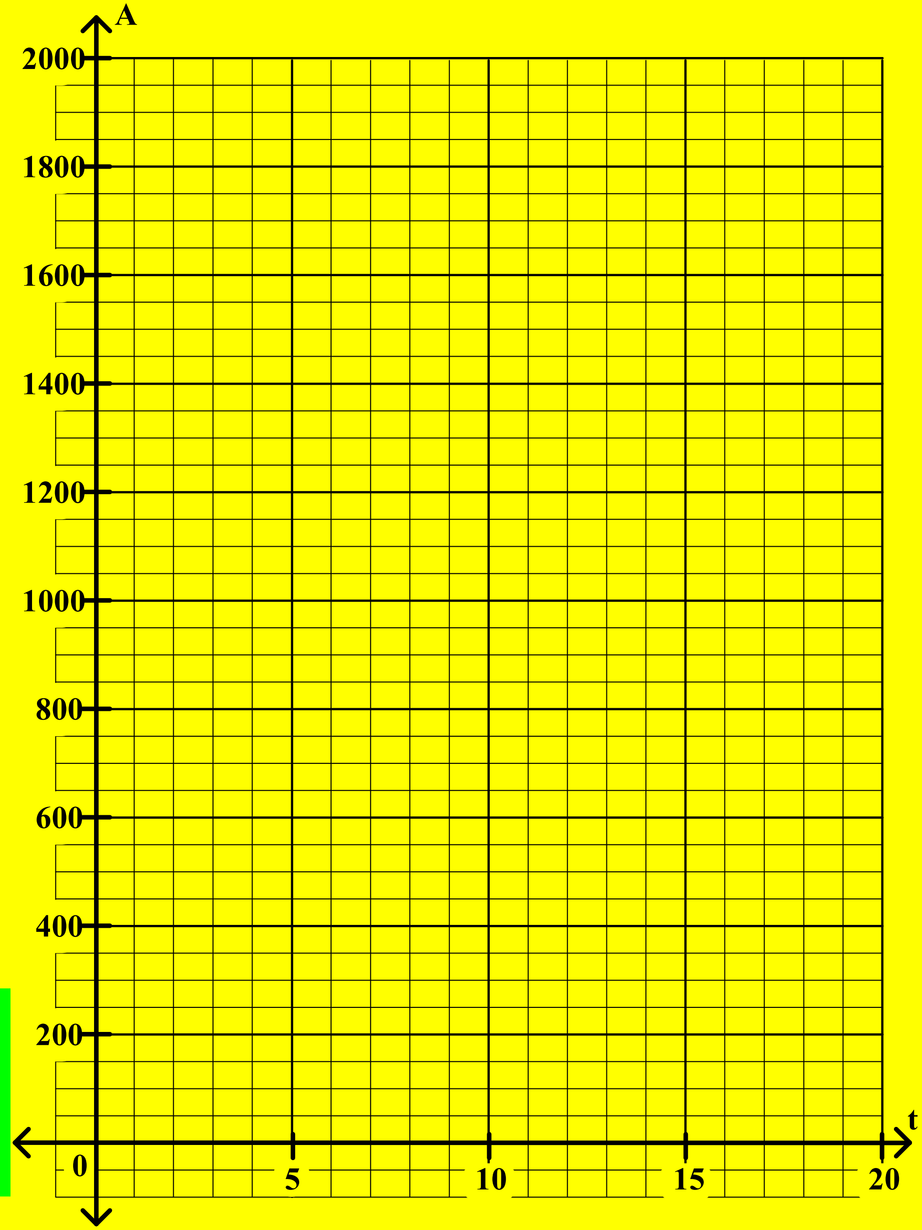

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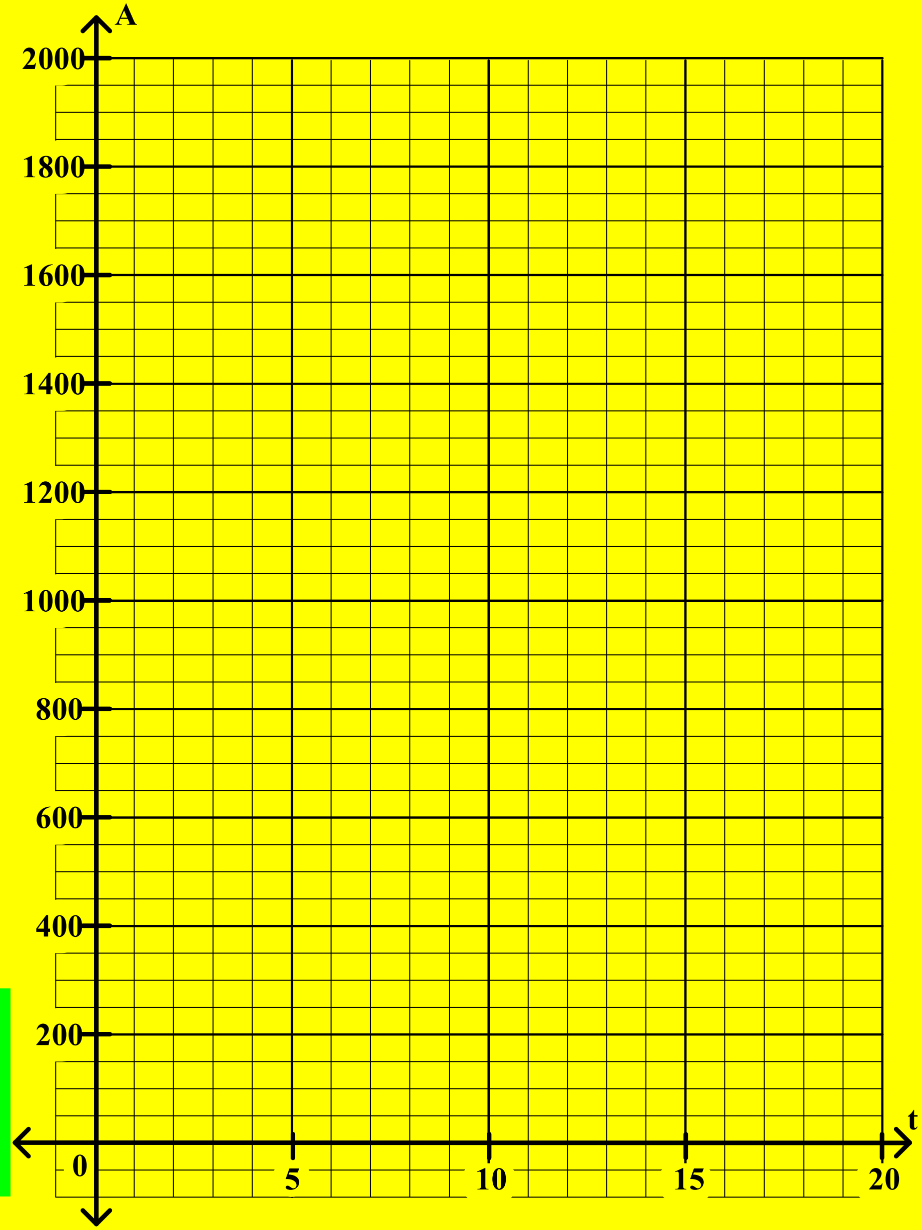

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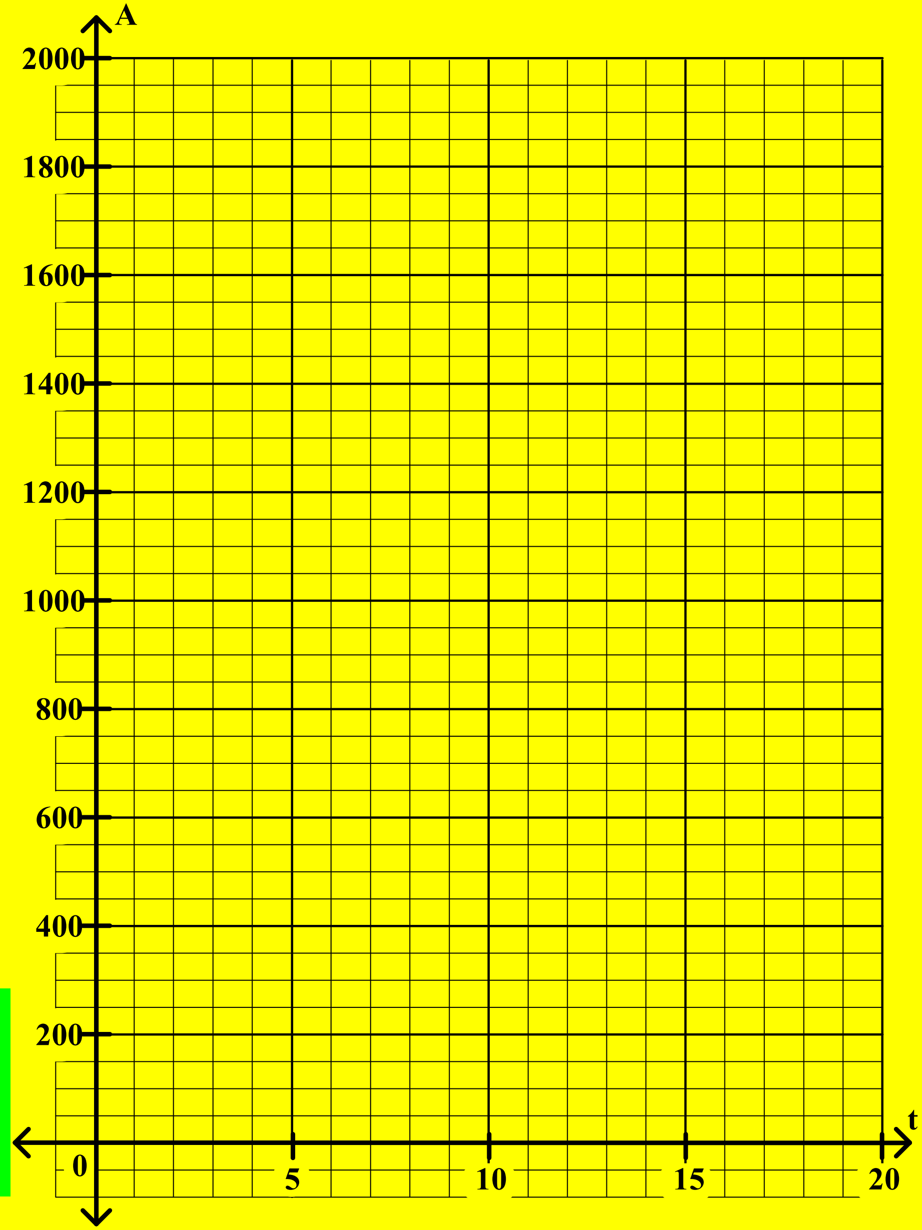

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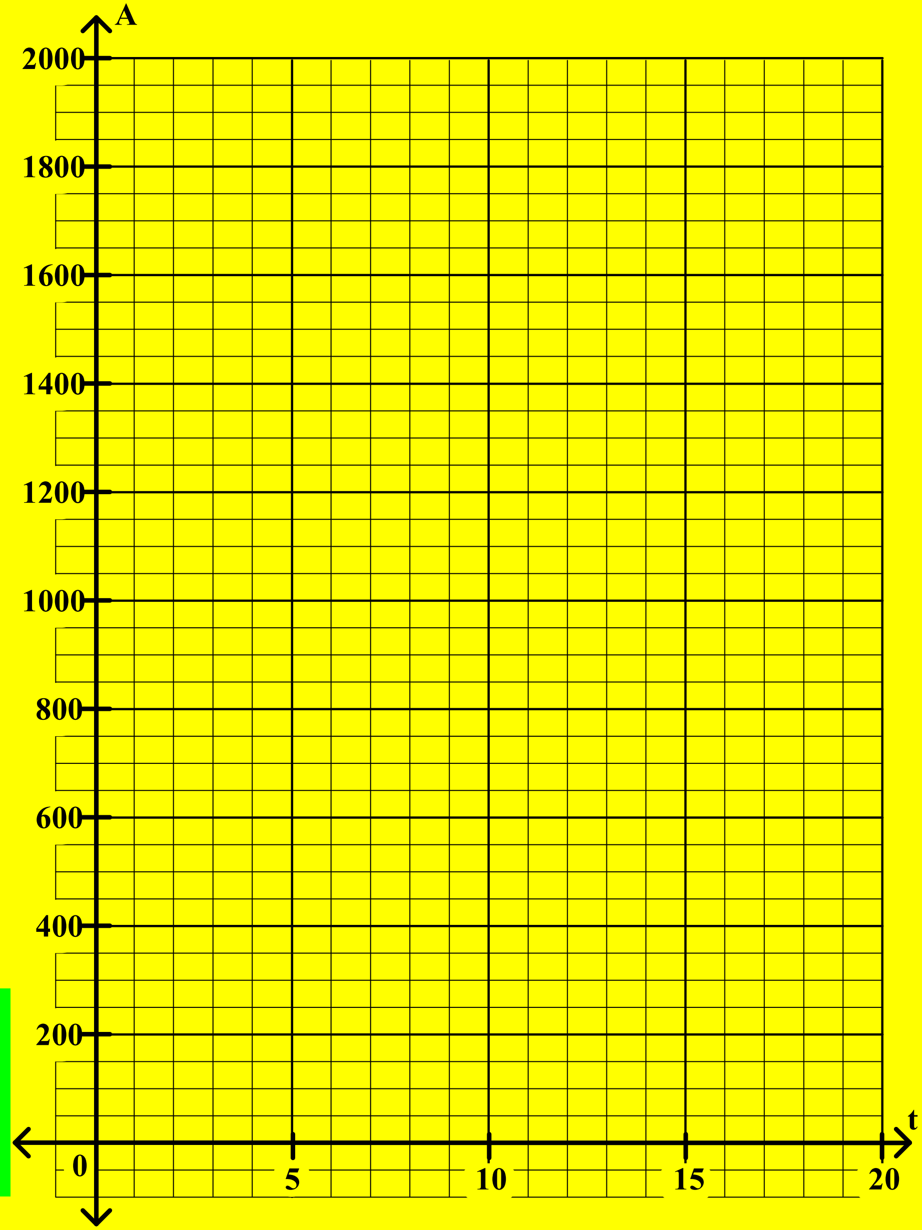

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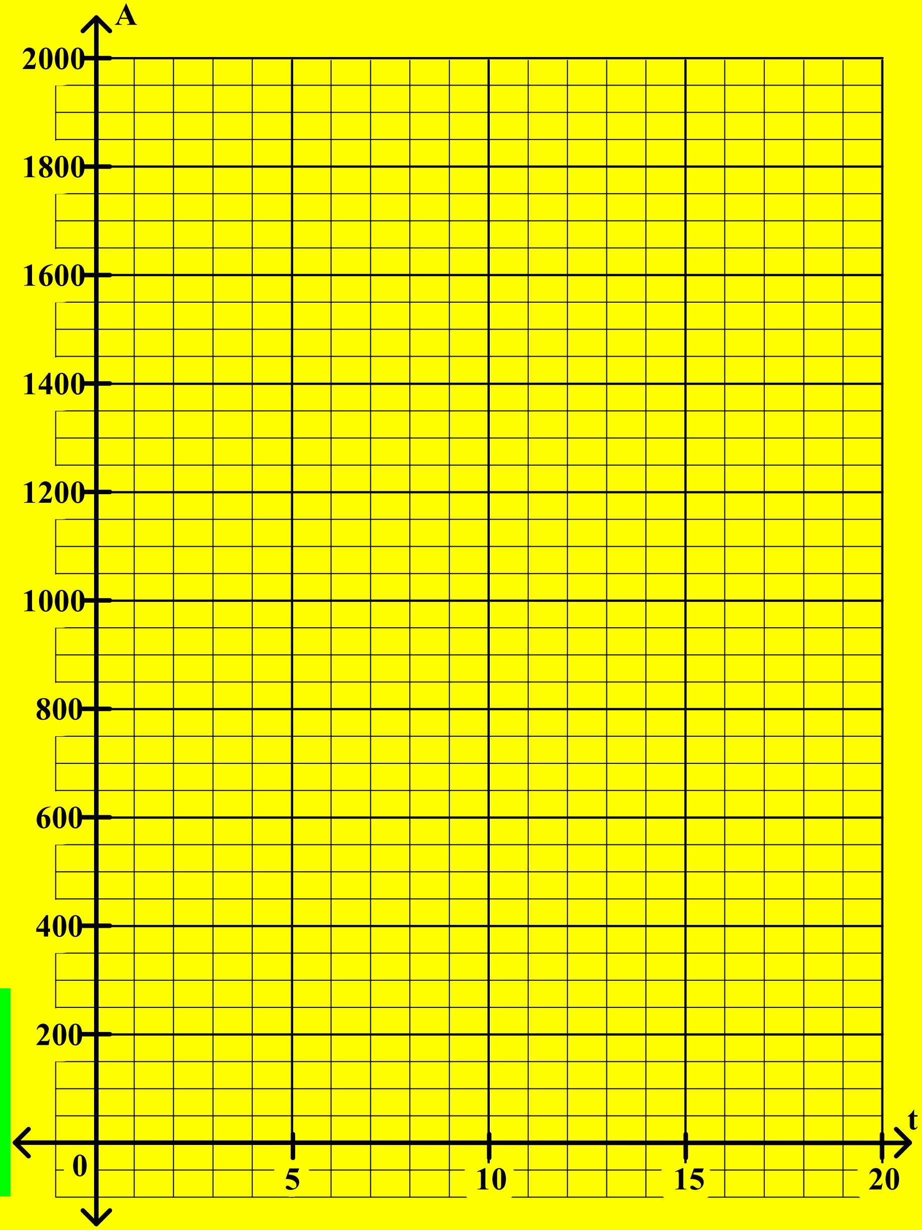

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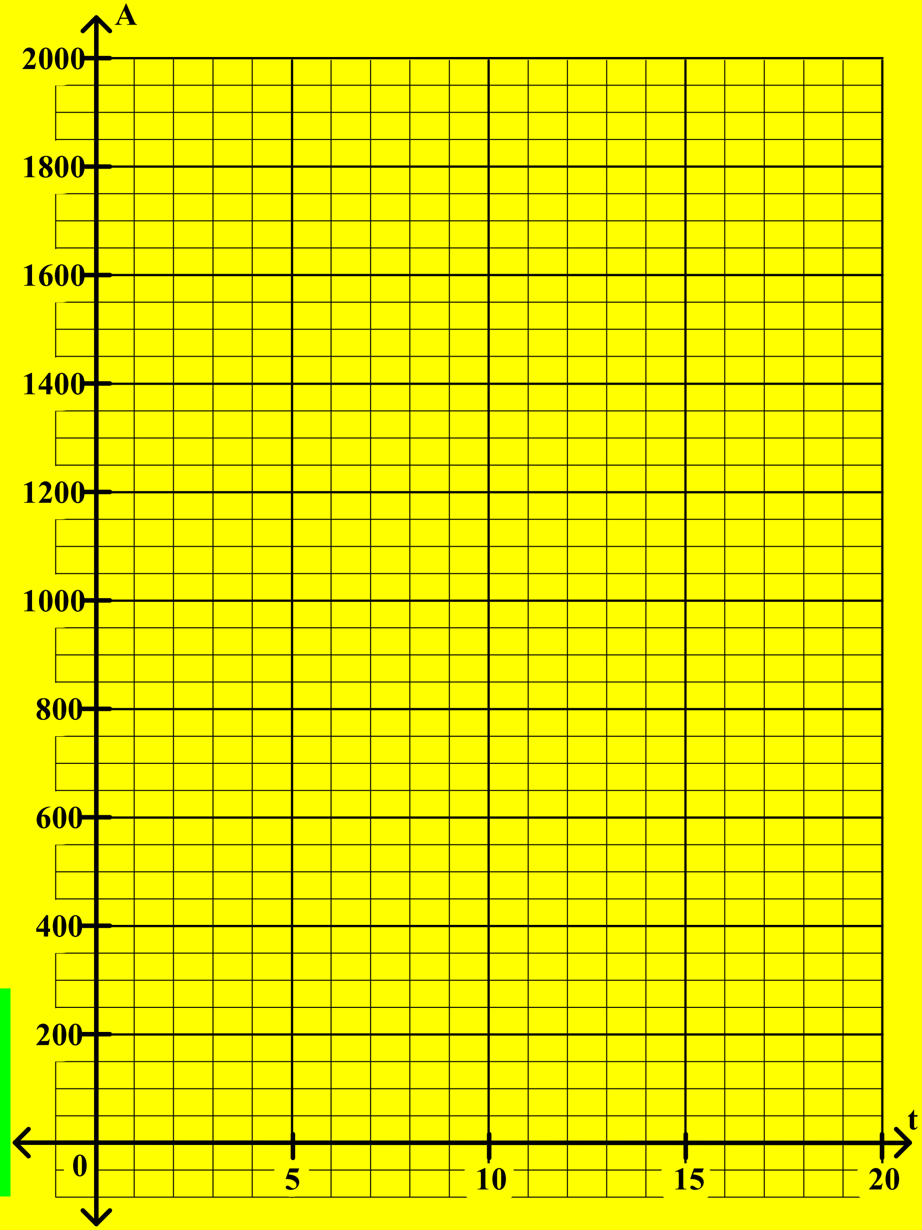

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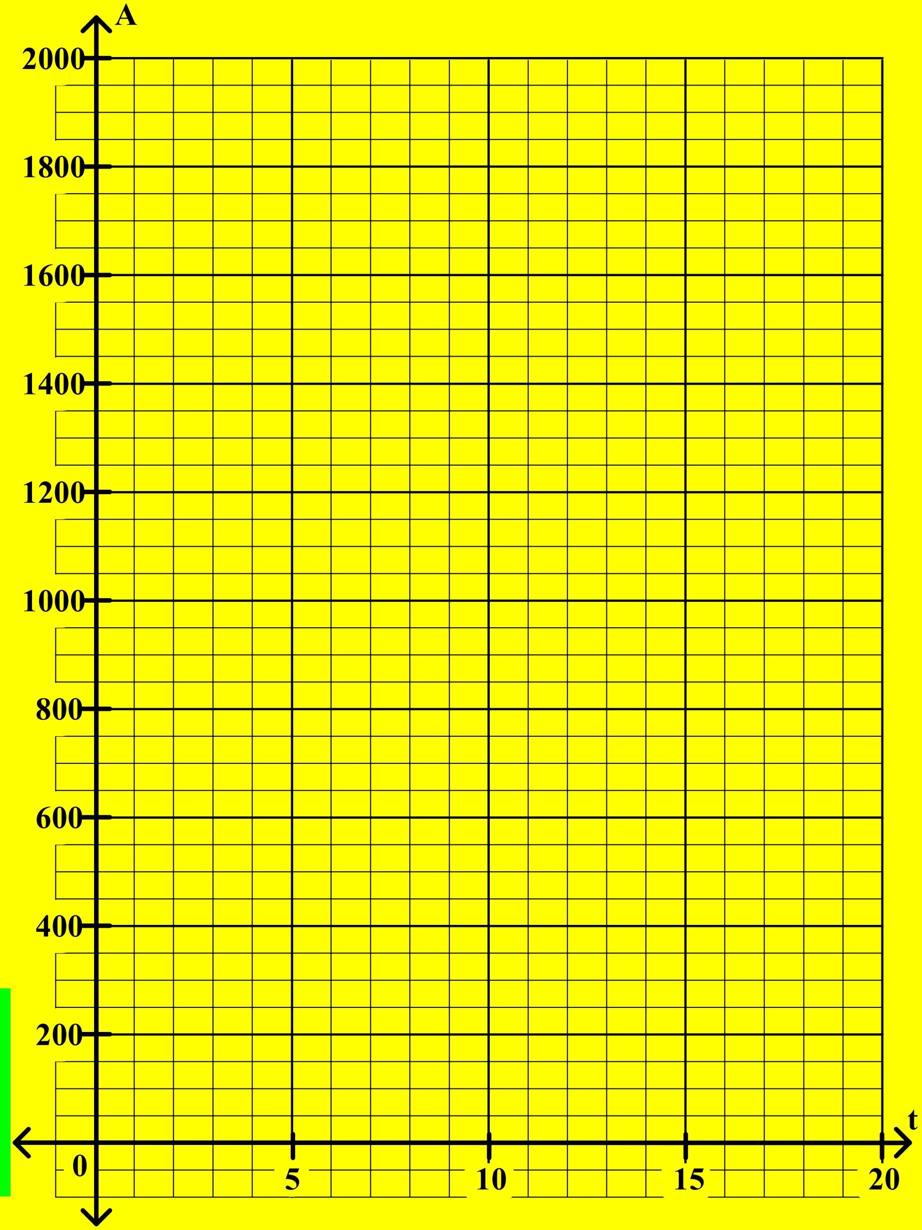

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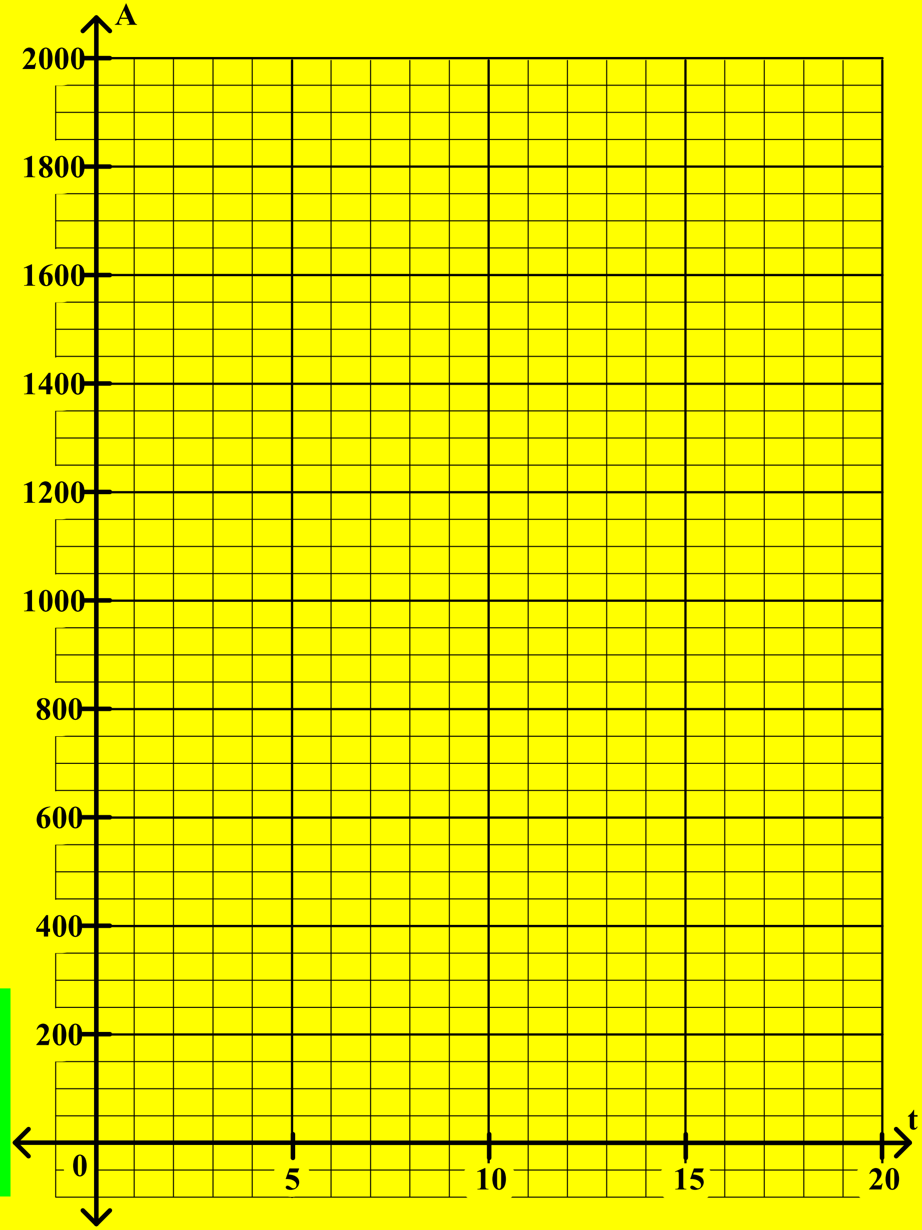

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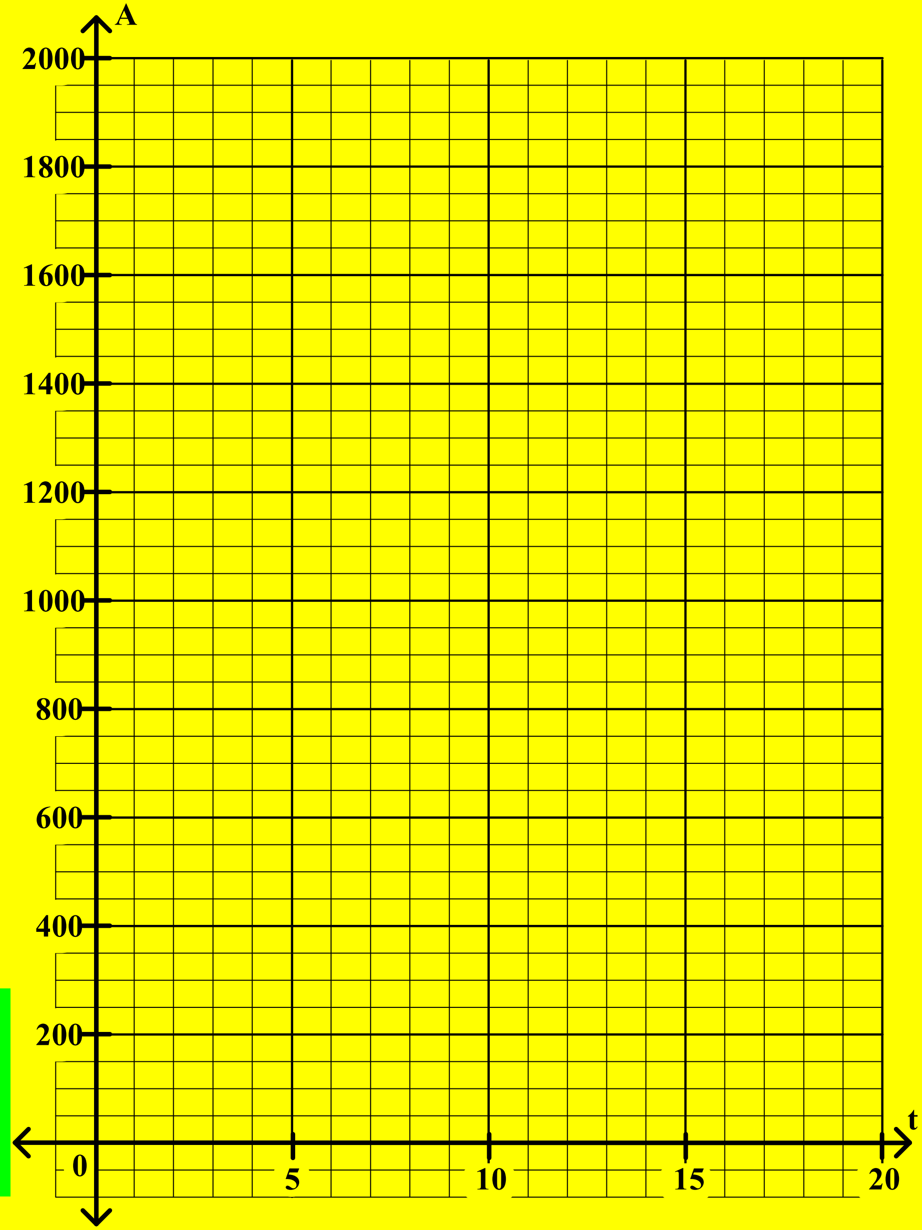

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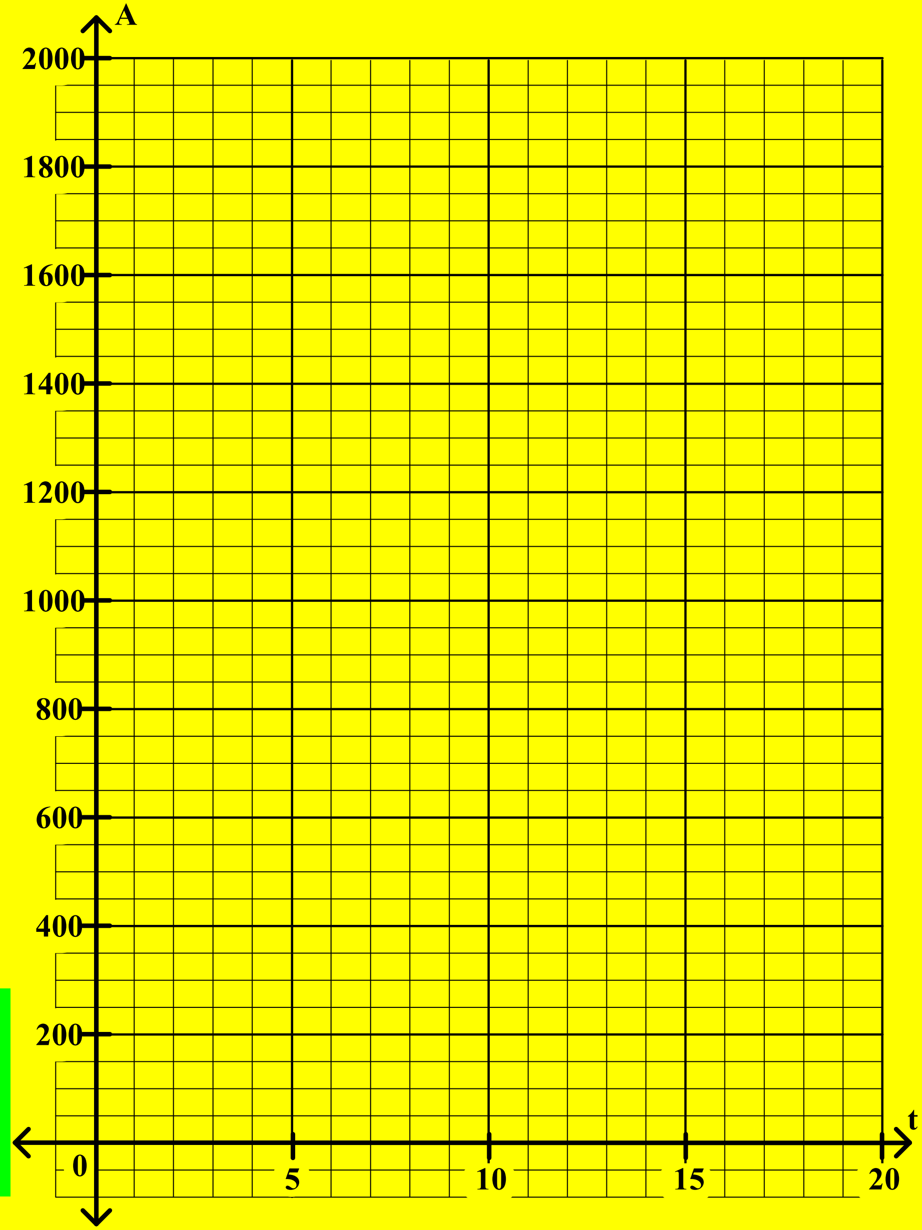

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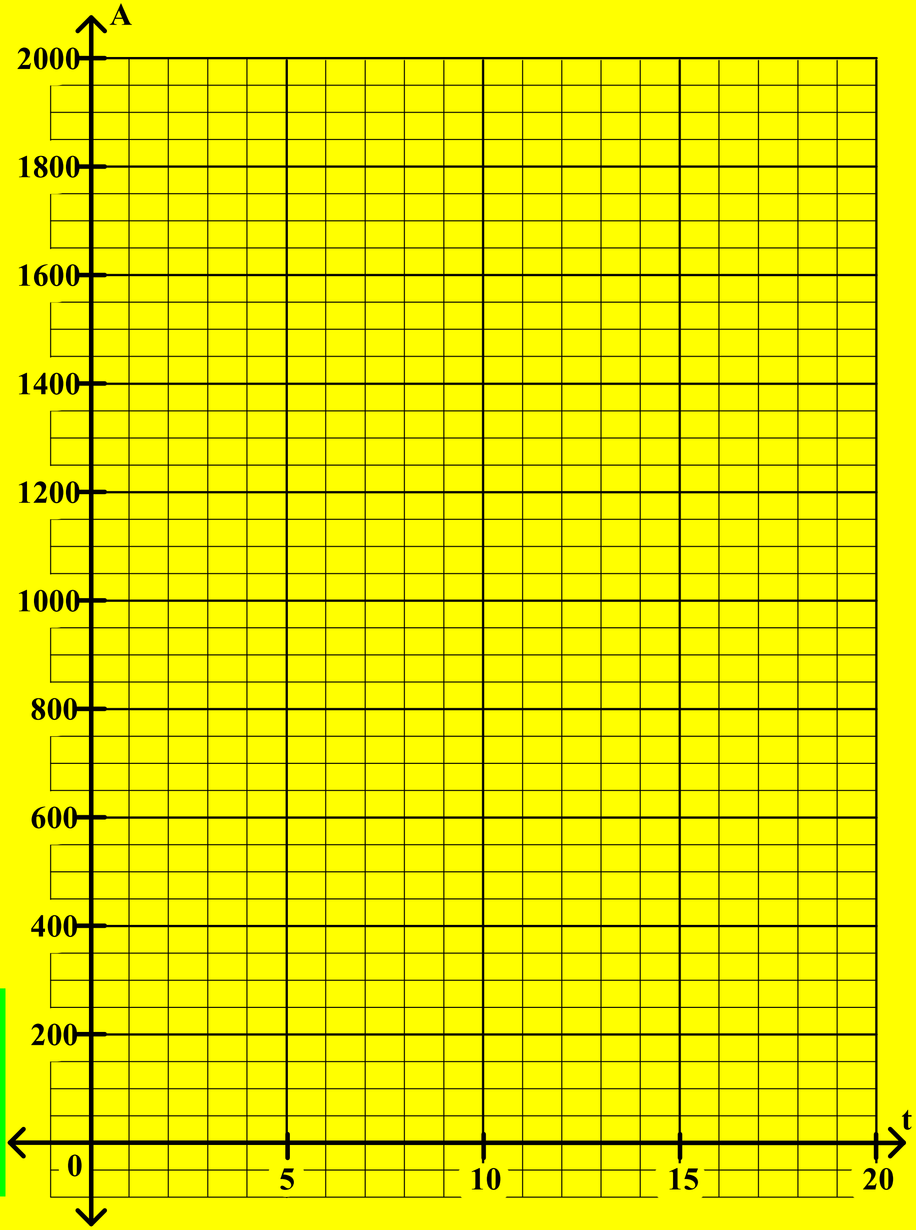

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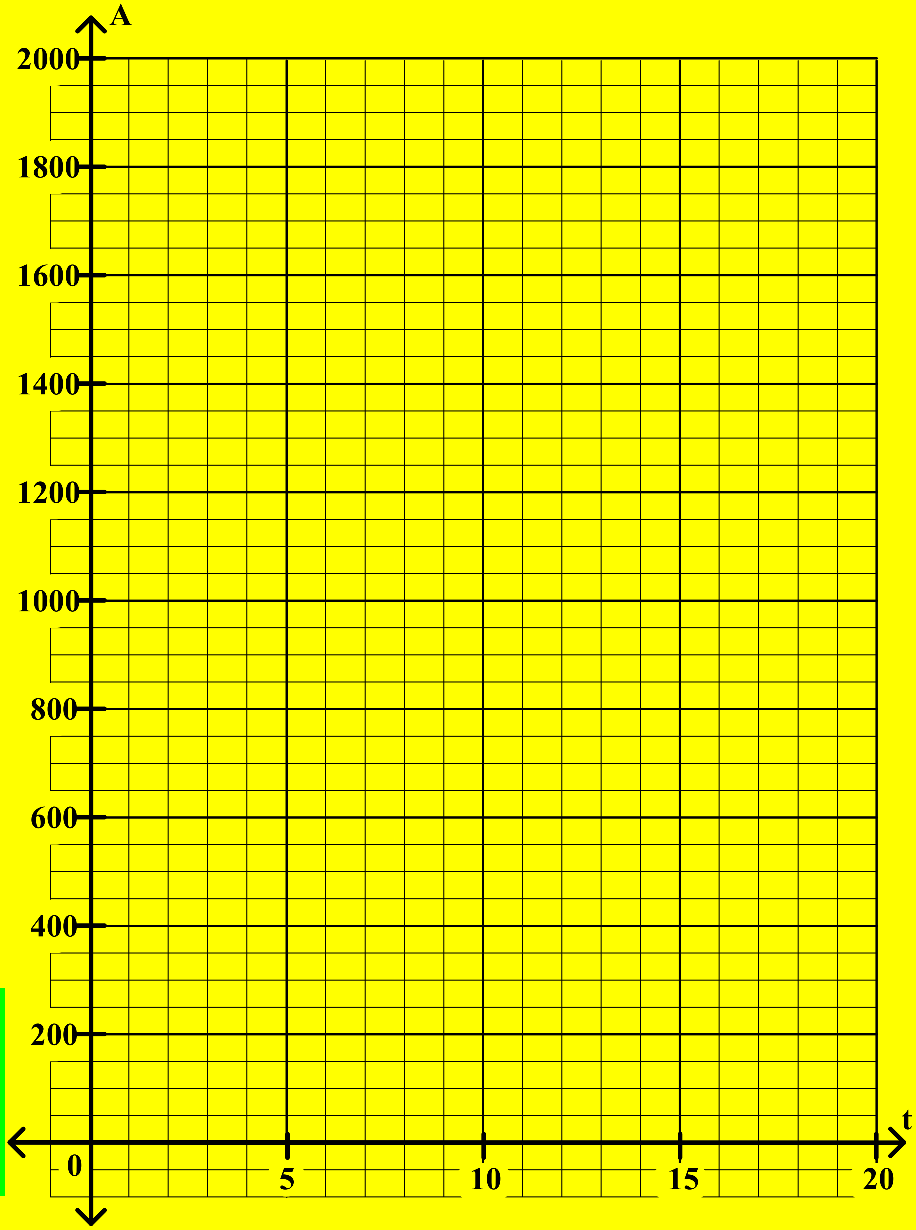

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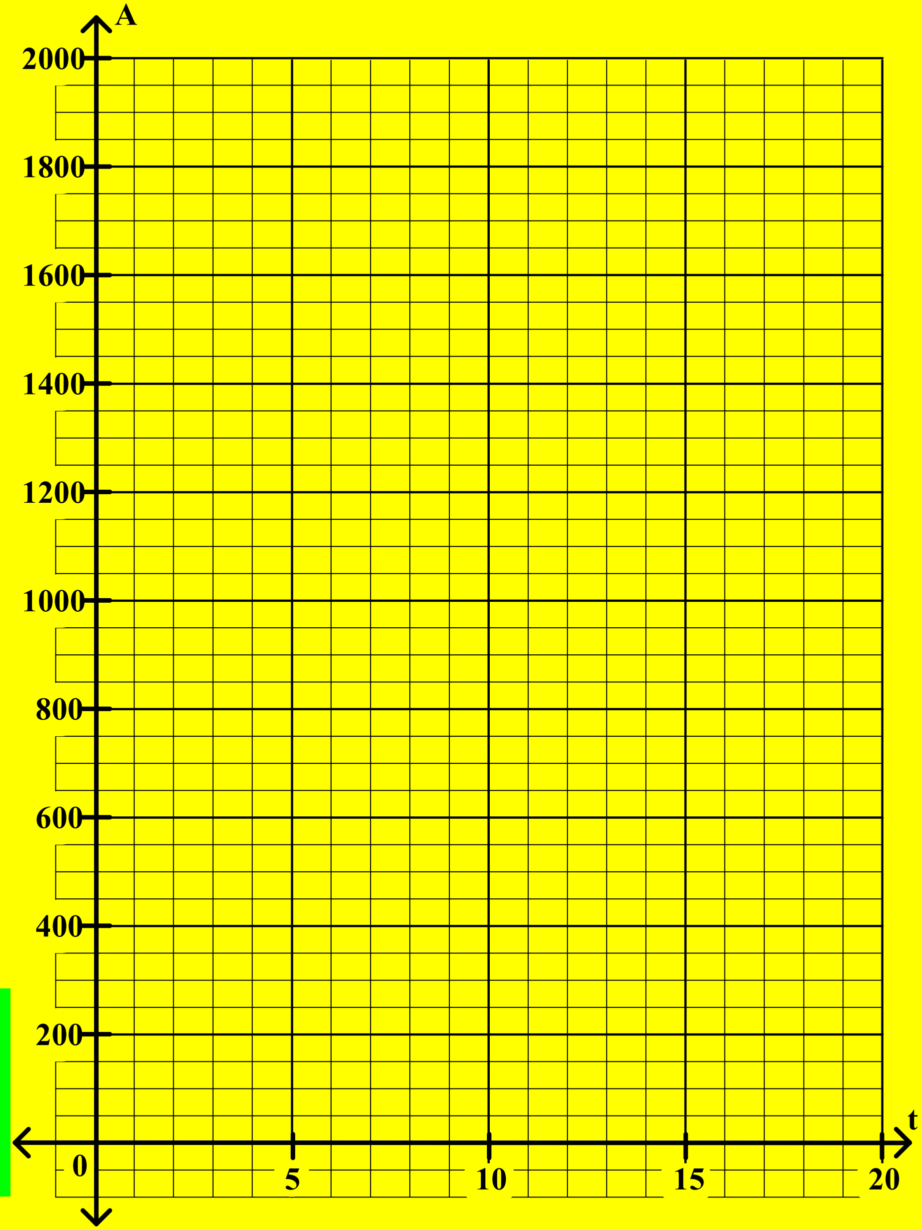

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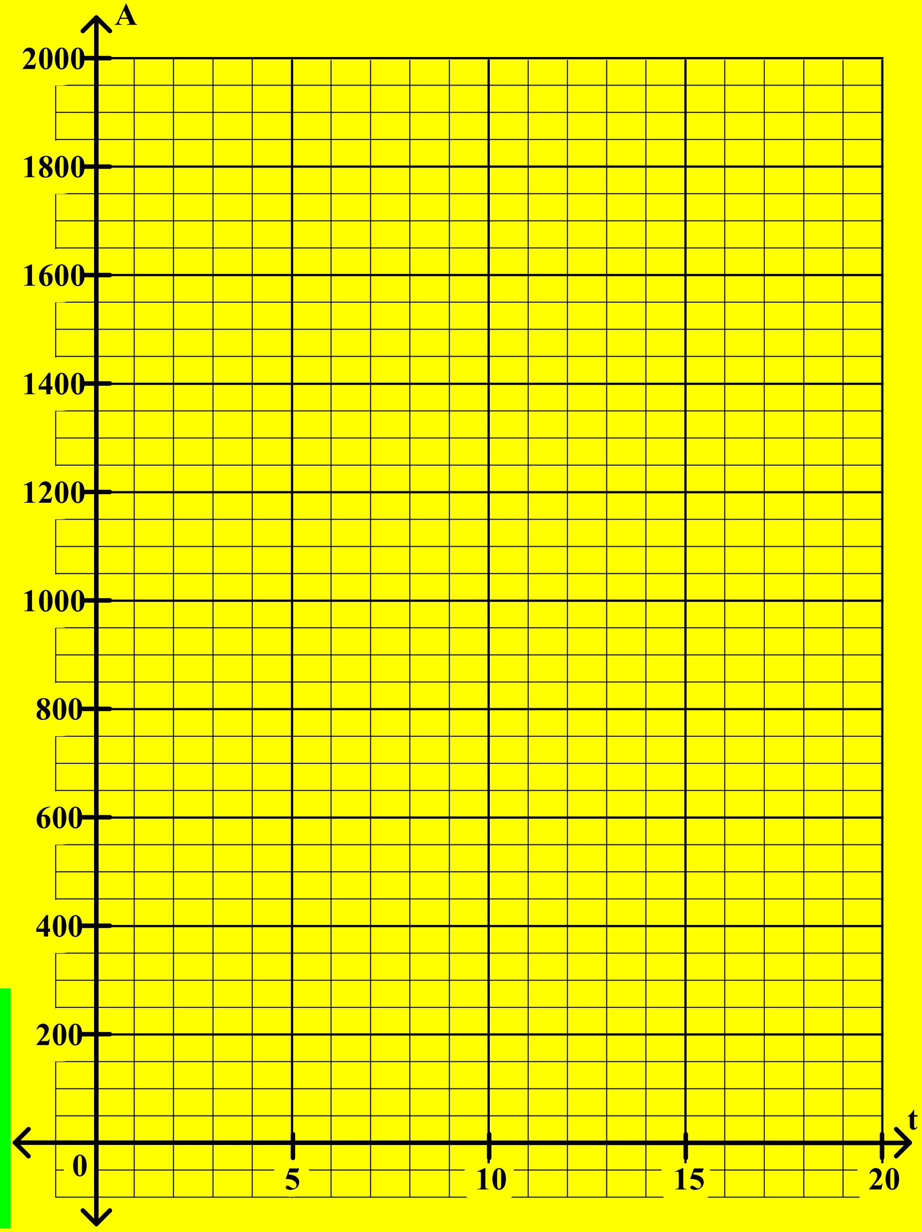

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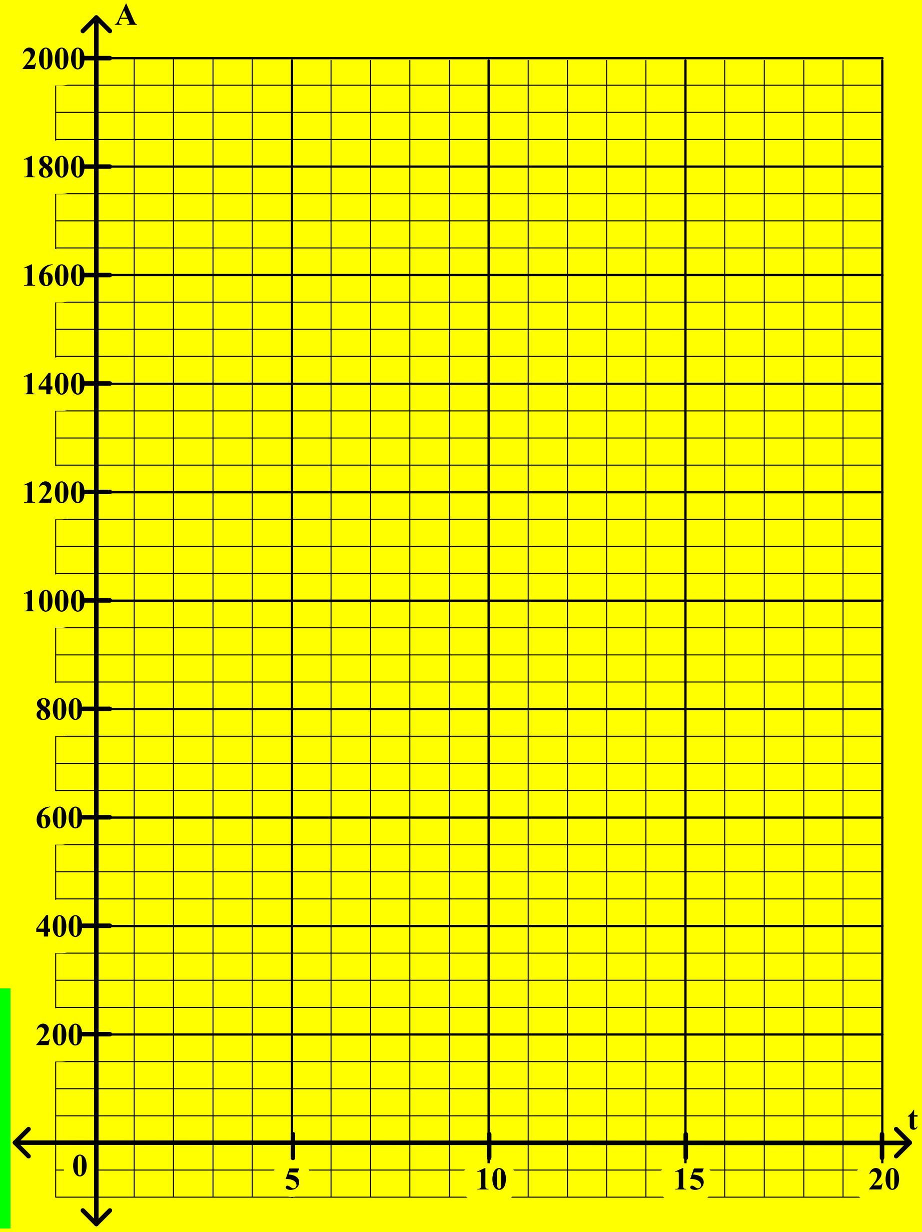

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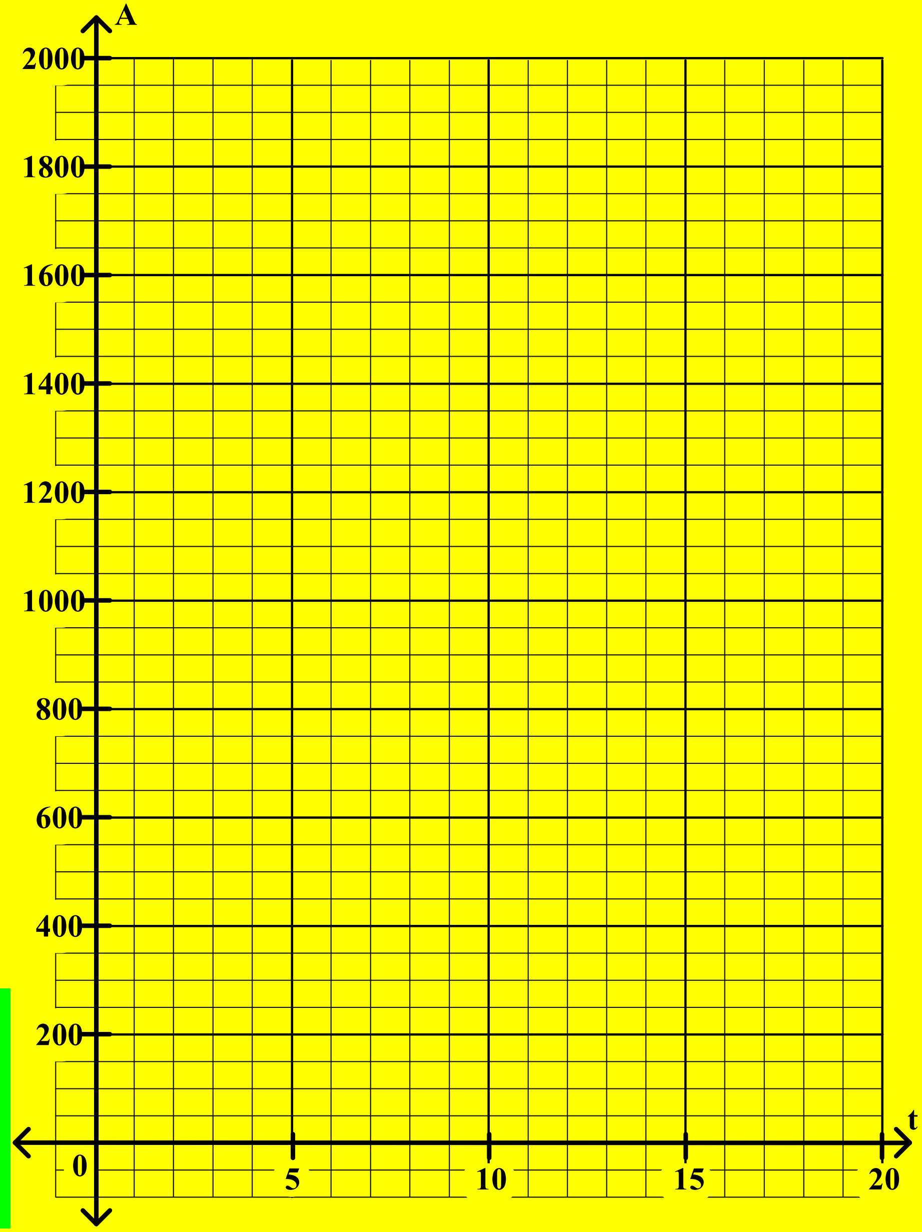

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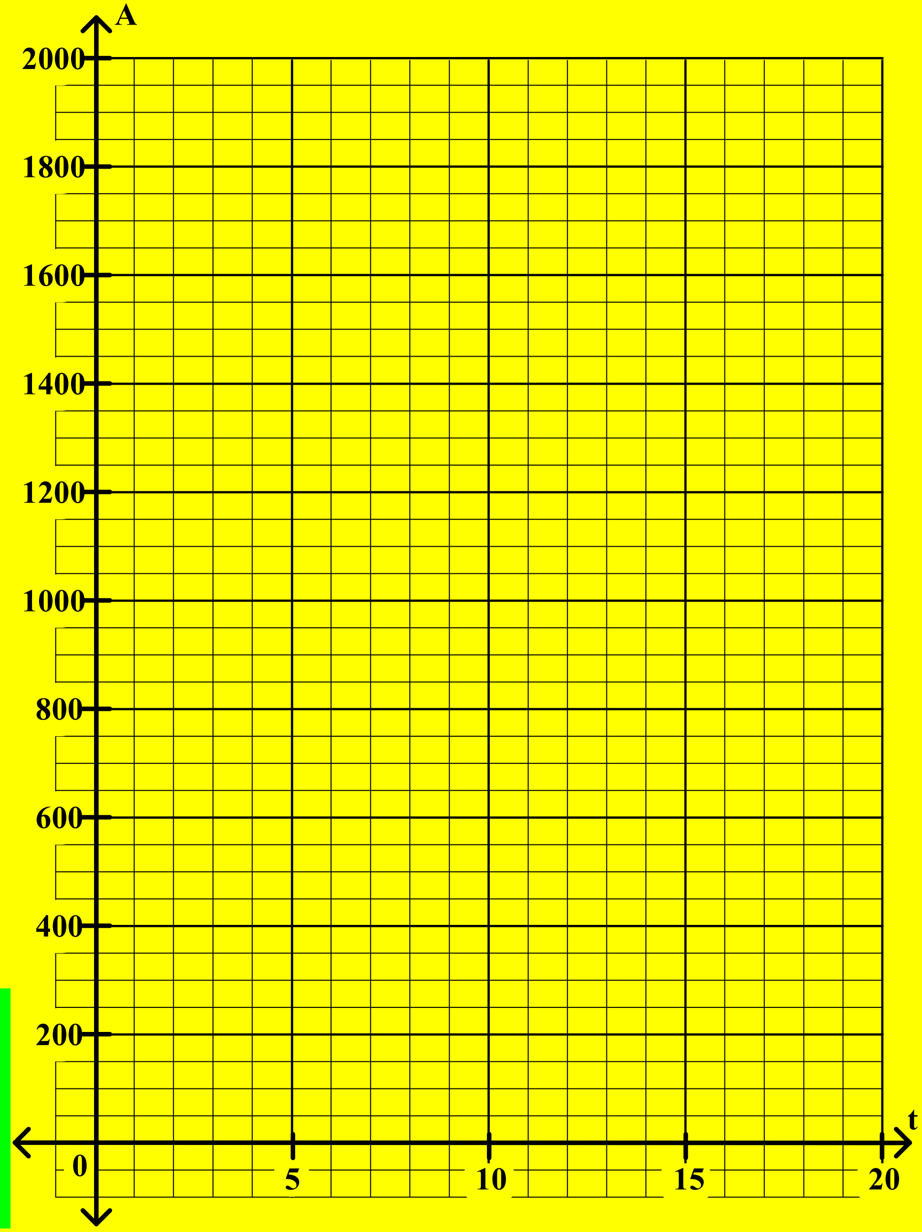

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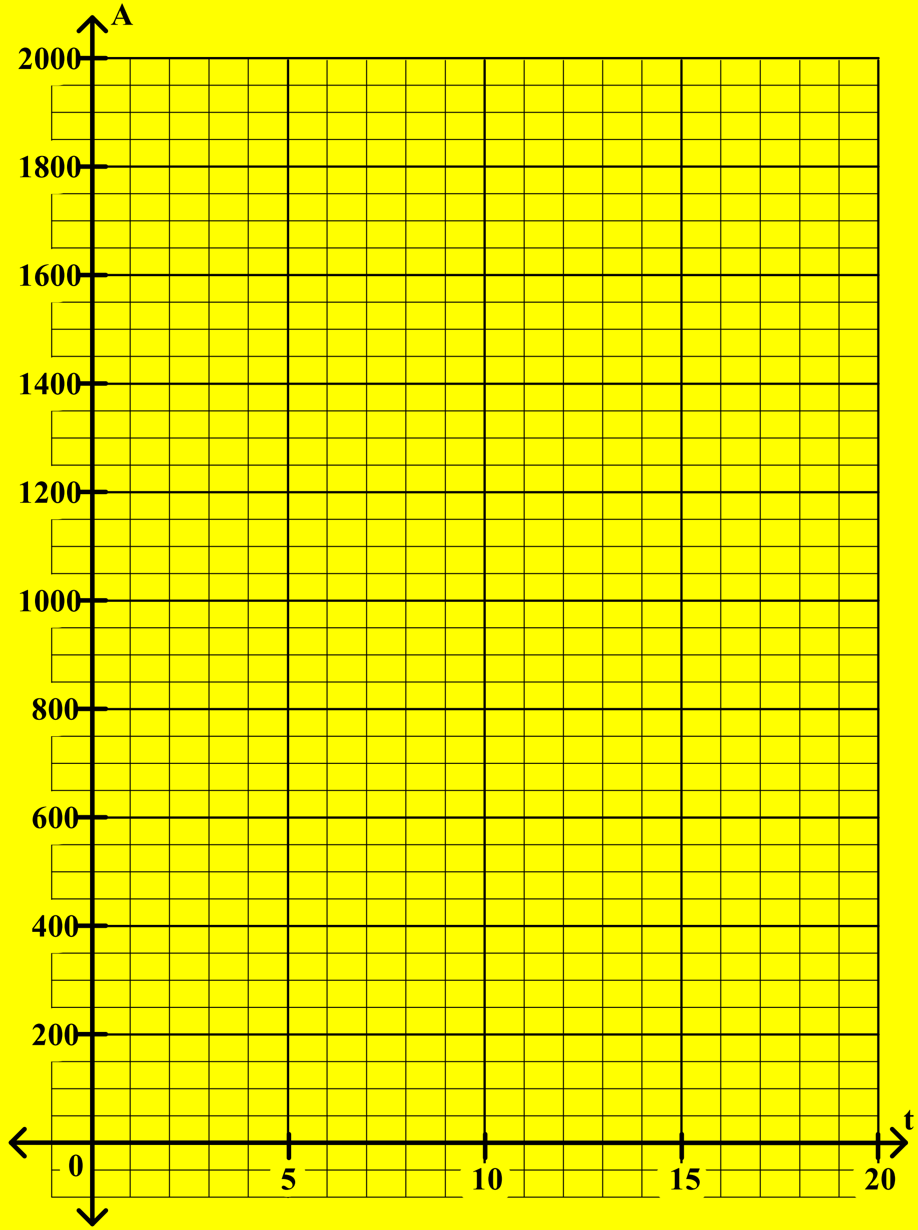

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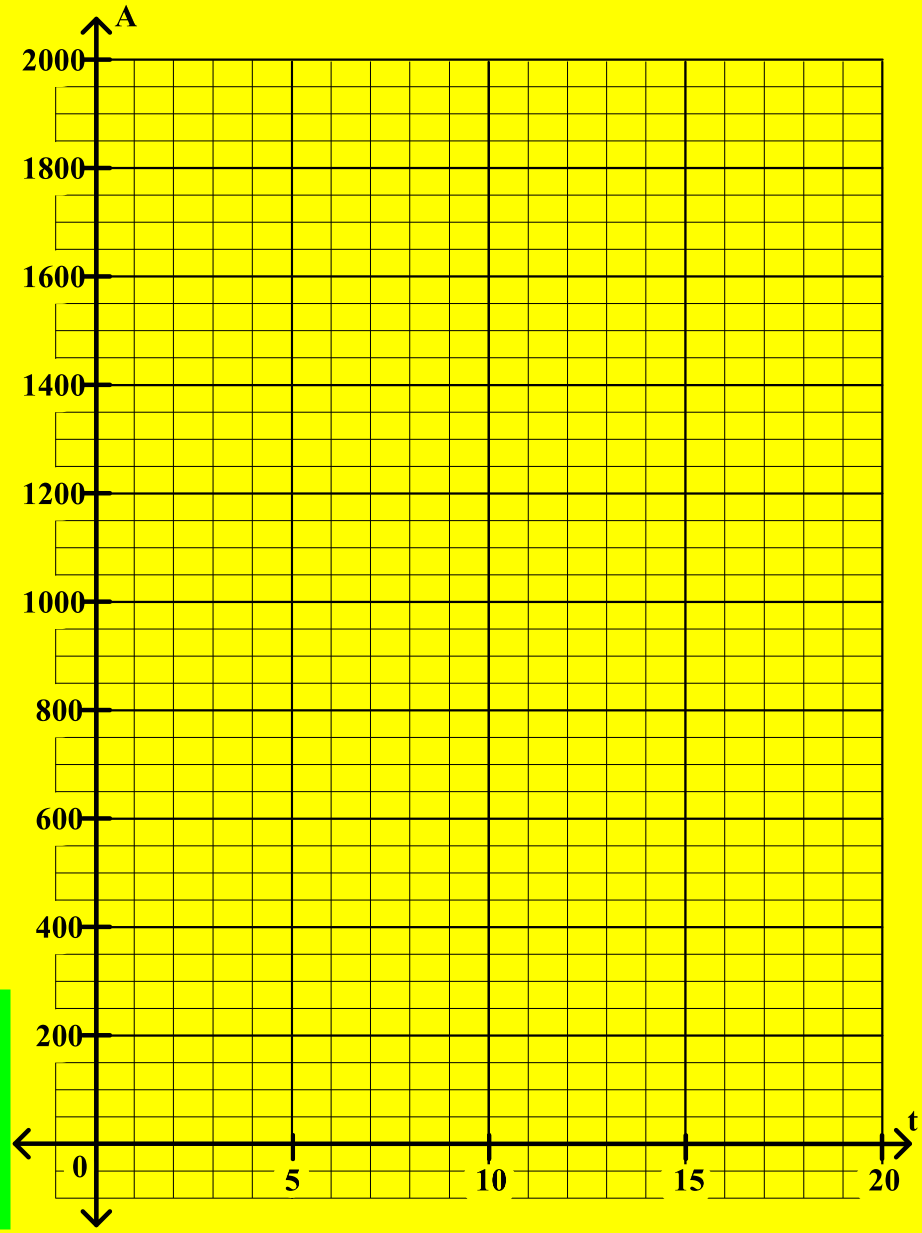

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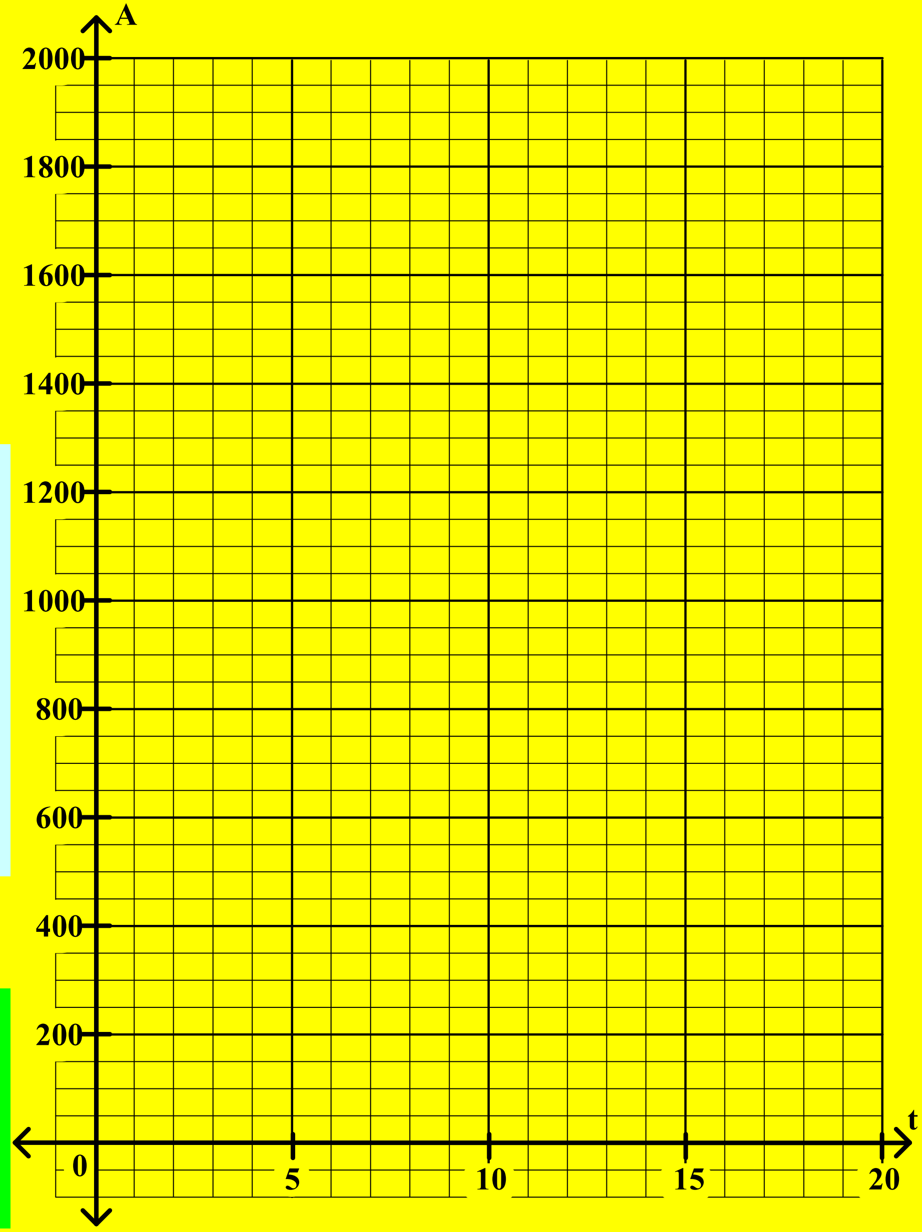

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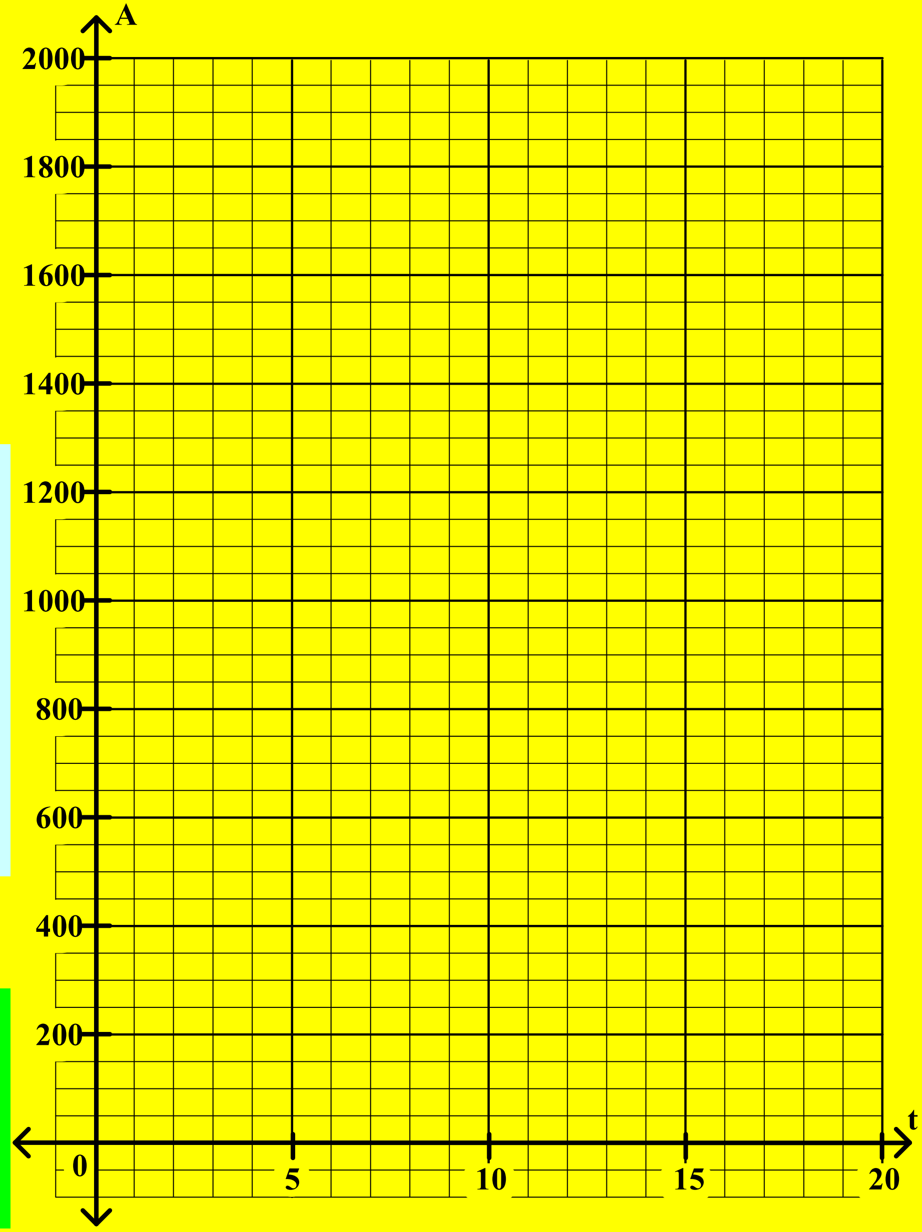
P = 600 ; R = 0.06 ; N = 12

$$A = 600\left(1 + \frac{0.06}{12}\right)^{12t}$$

$$A = 600(1.005)^{12t}$$

t	A
0	

Use the function to fill out a table of values.



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$$A = 600(1.005)^{12t}$$

t	A
0	600

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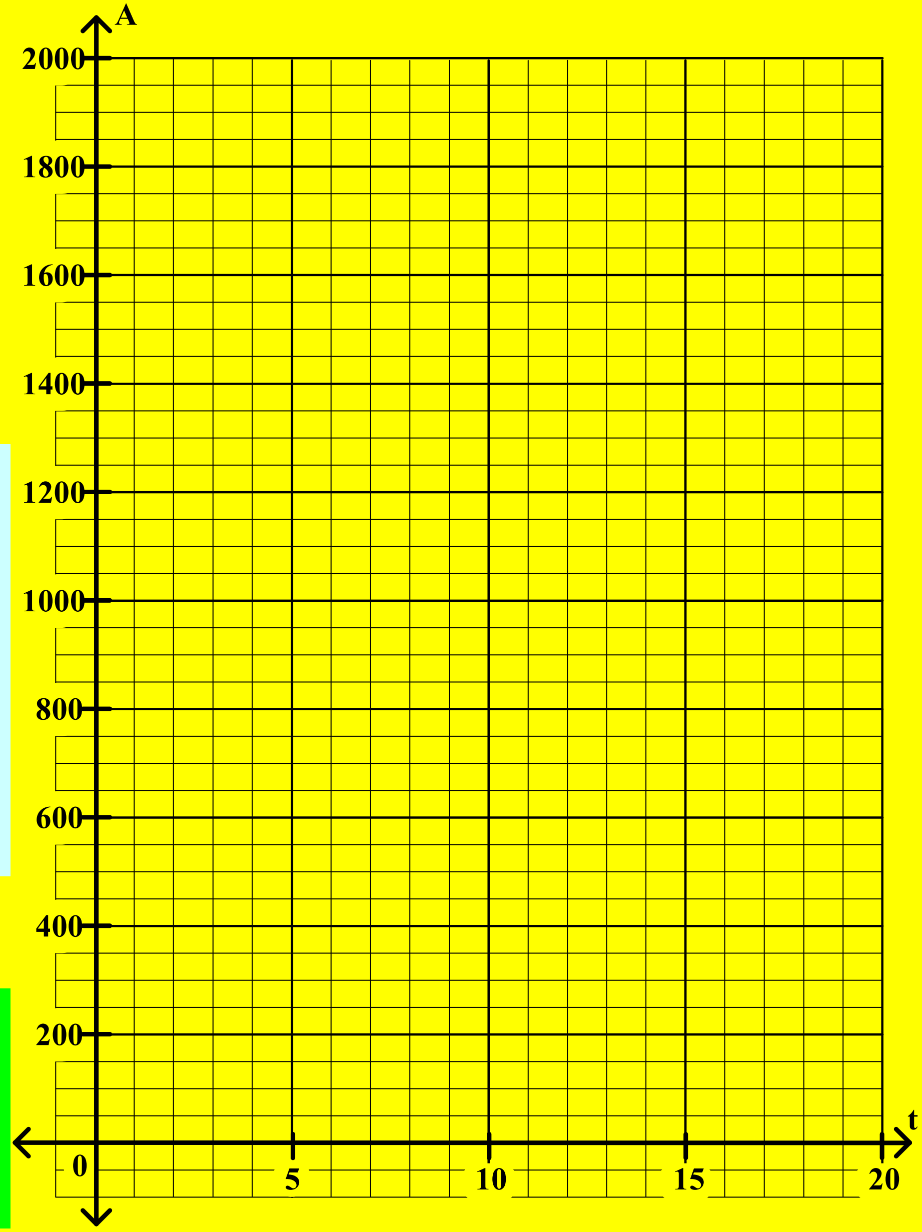

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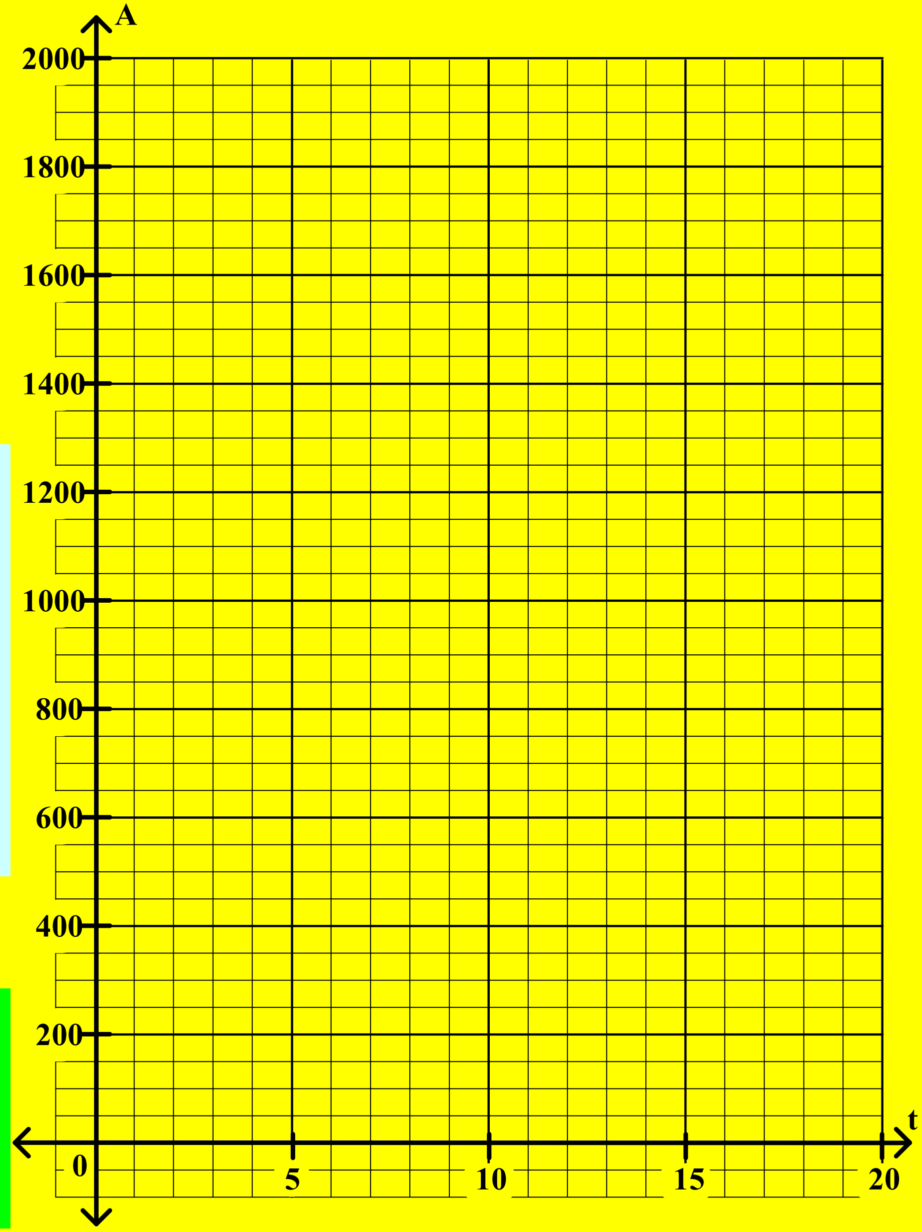
t	A
0	600
5	

Use the function to fill out a table of values.



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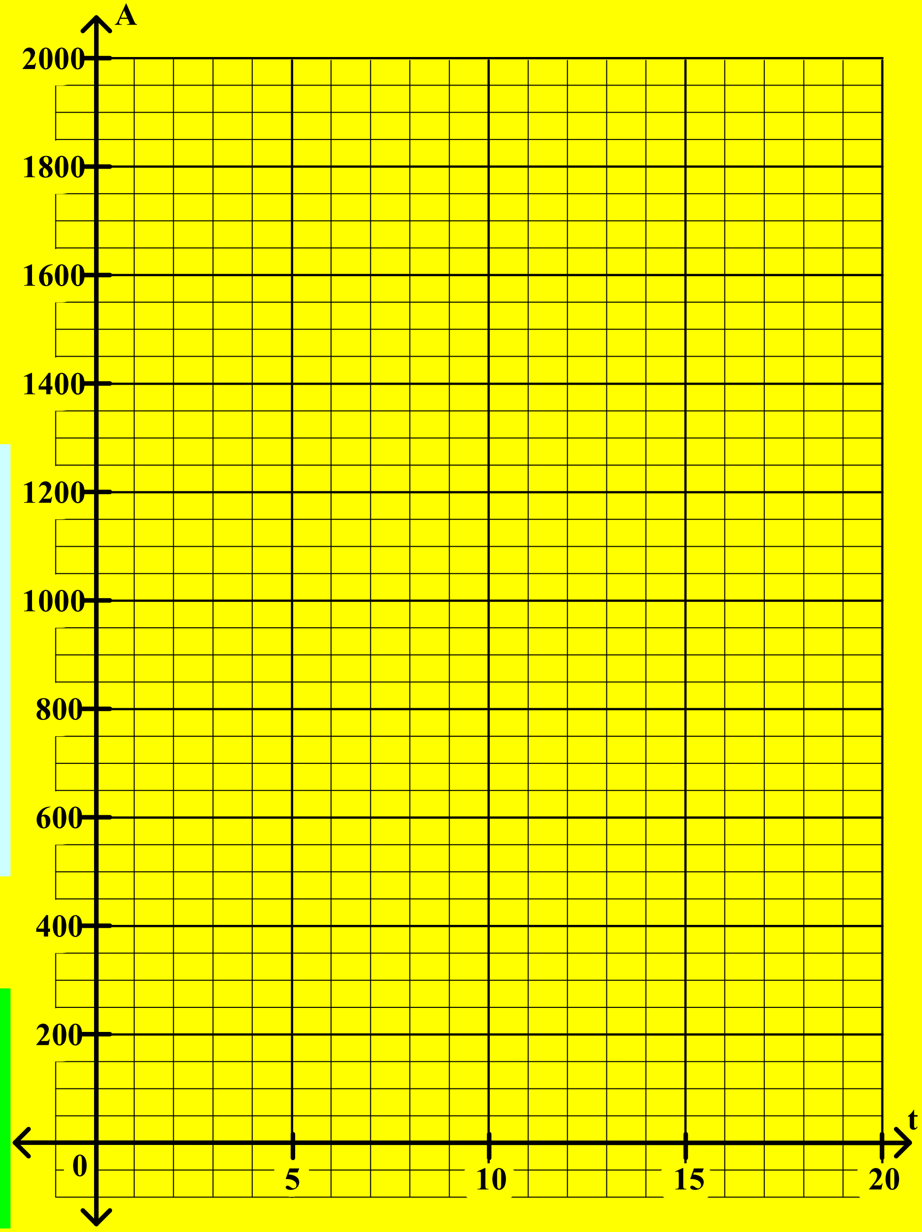
t	A
0	600
5	809

Use the function to fill out a table of values.



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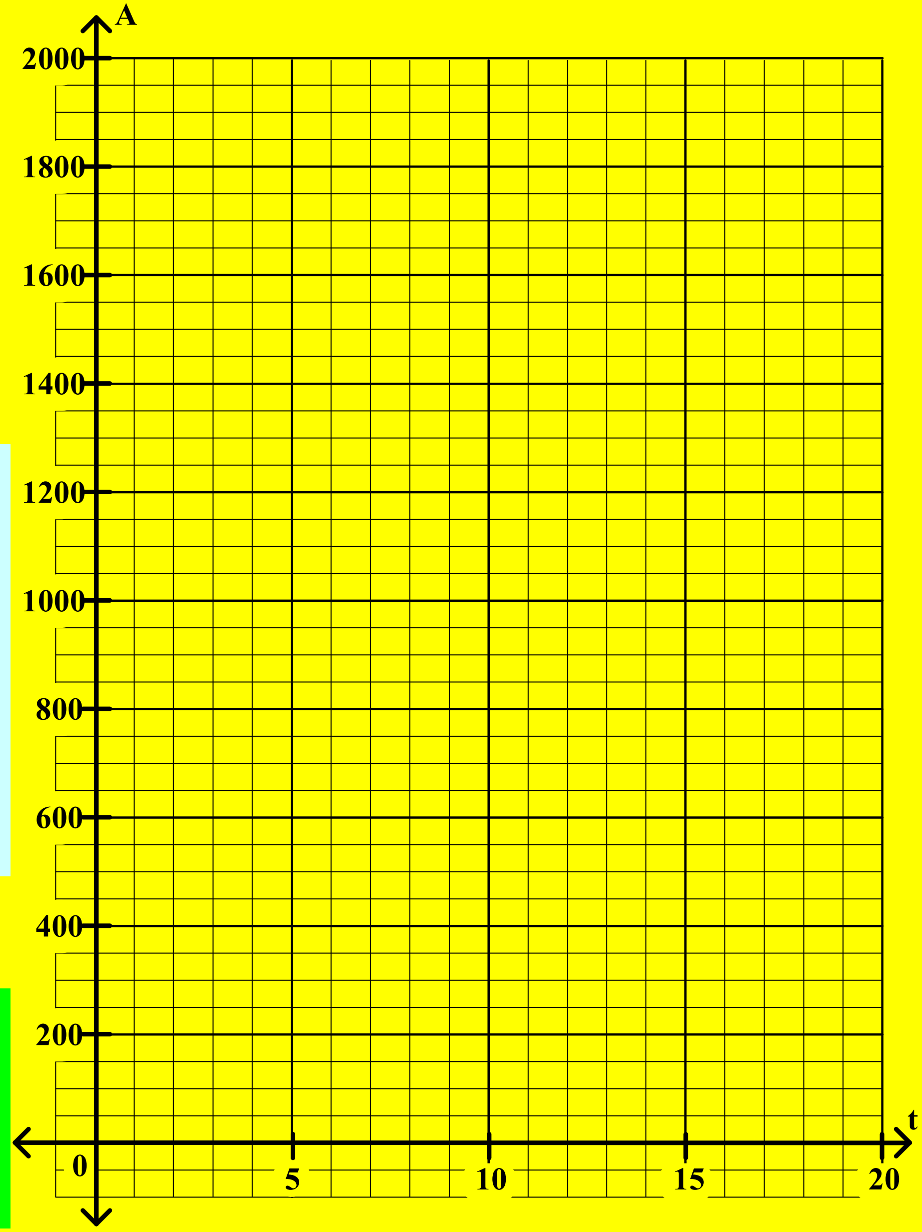
t	A
0	600
5	809
10	

Use the function to fill out a table of values.



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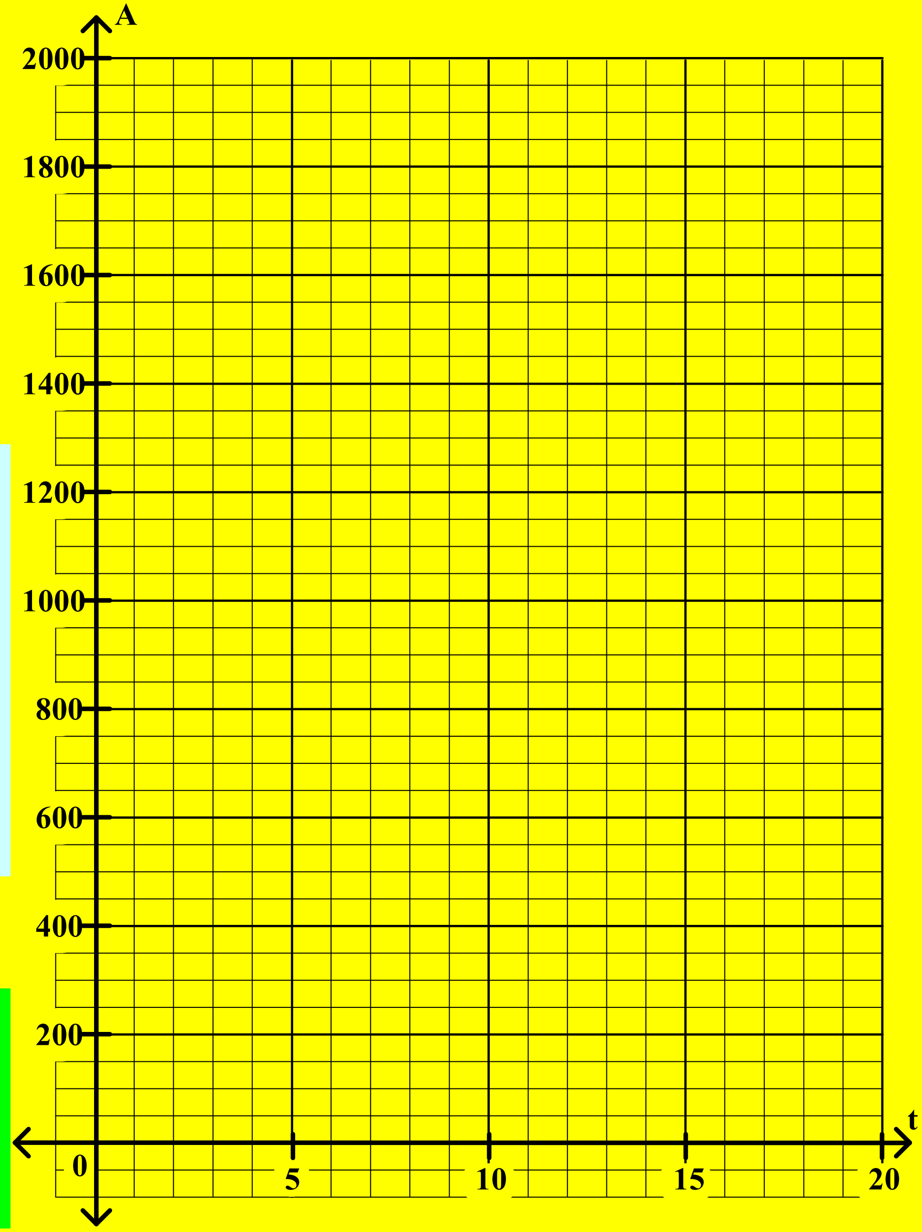
t	A
0	600
5	809
10	1092

Use the function to fill out a table of values.



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t	A
0	600
5	809
10	1092
15	

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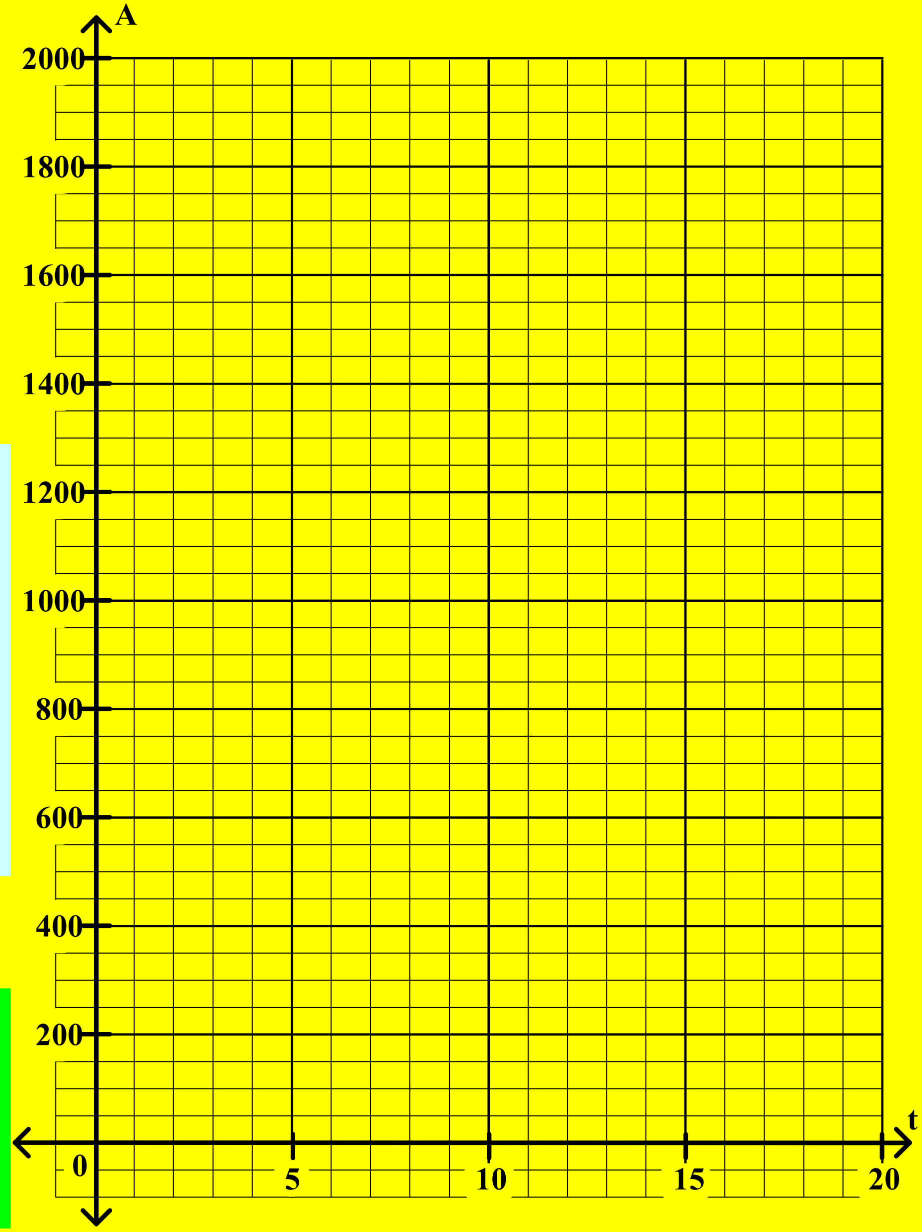

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t	A
0	600
5	809
10	1092
15	1472

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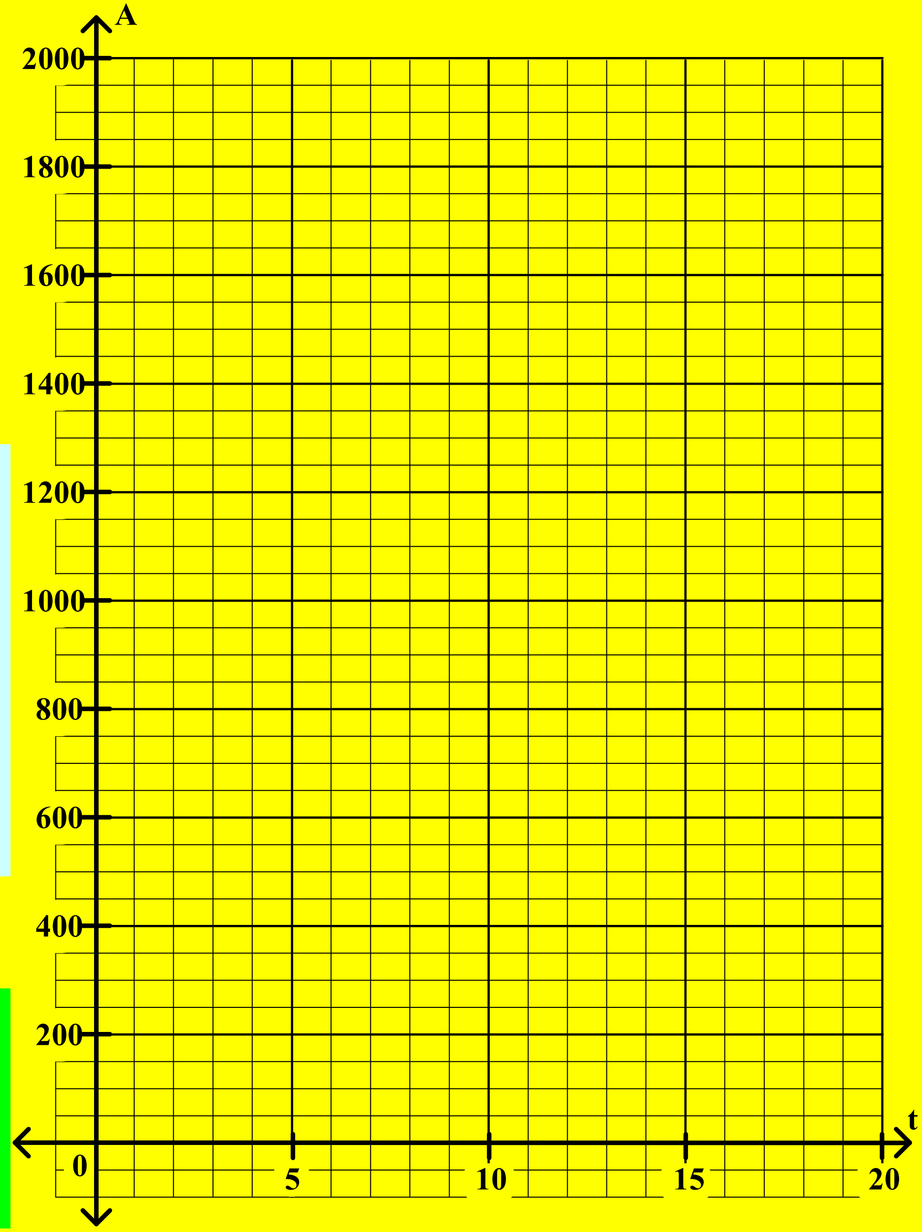

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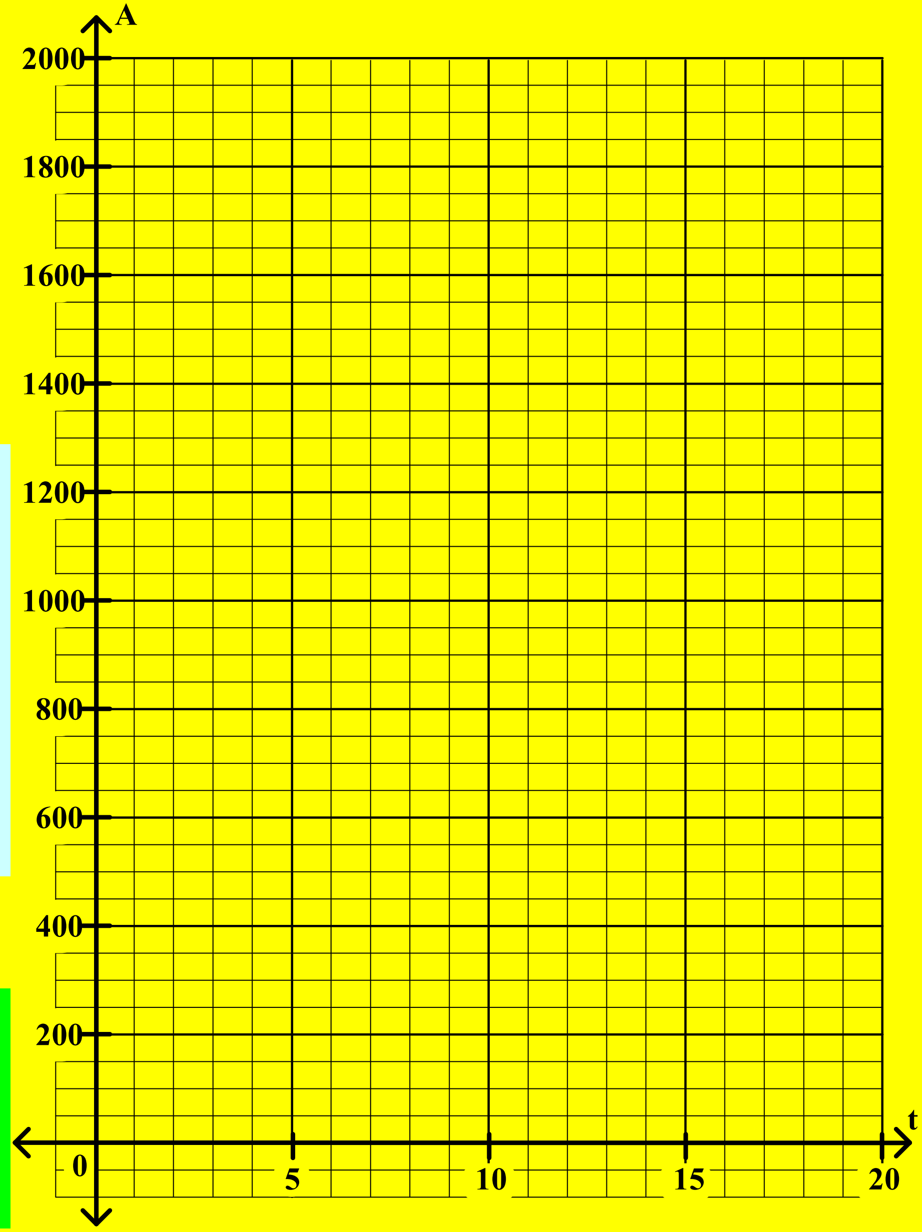

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20	1986

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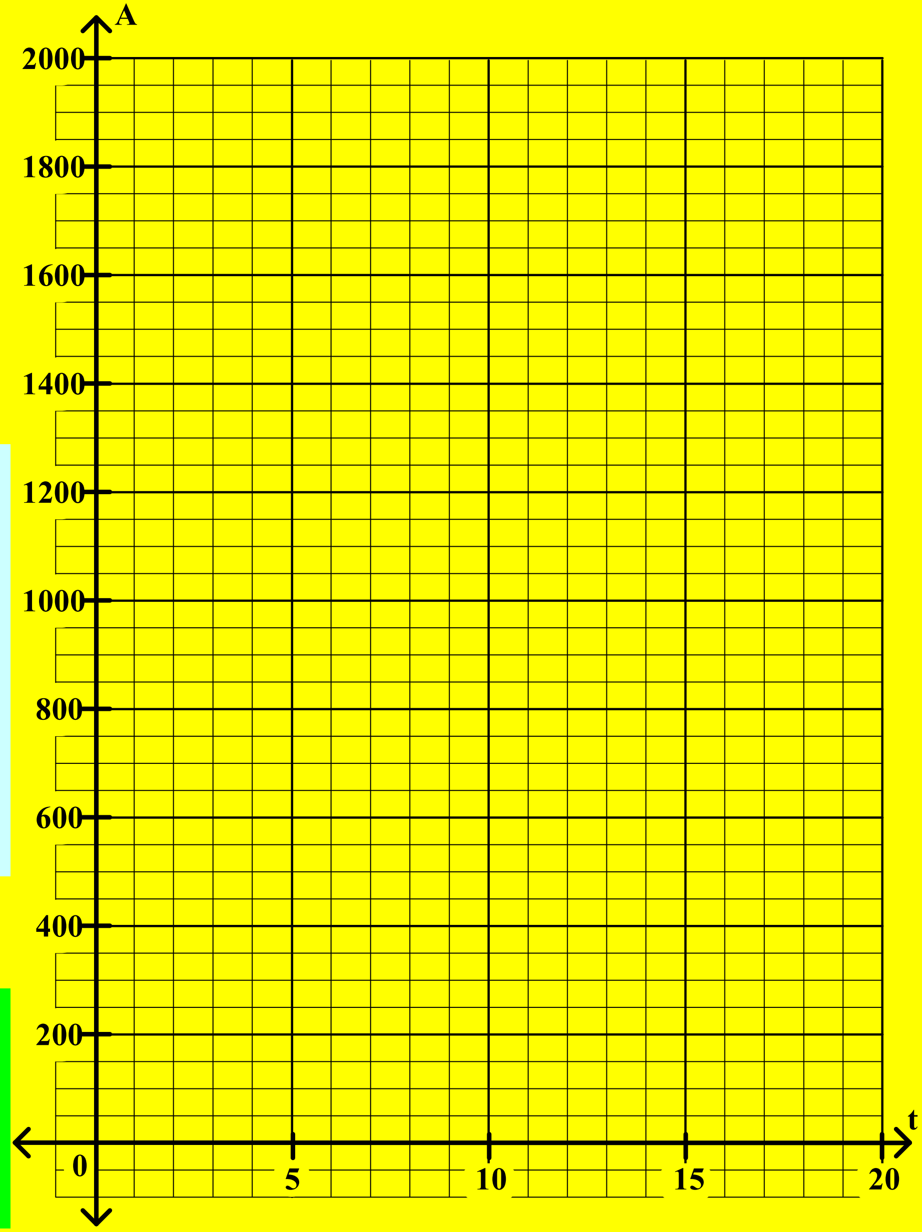

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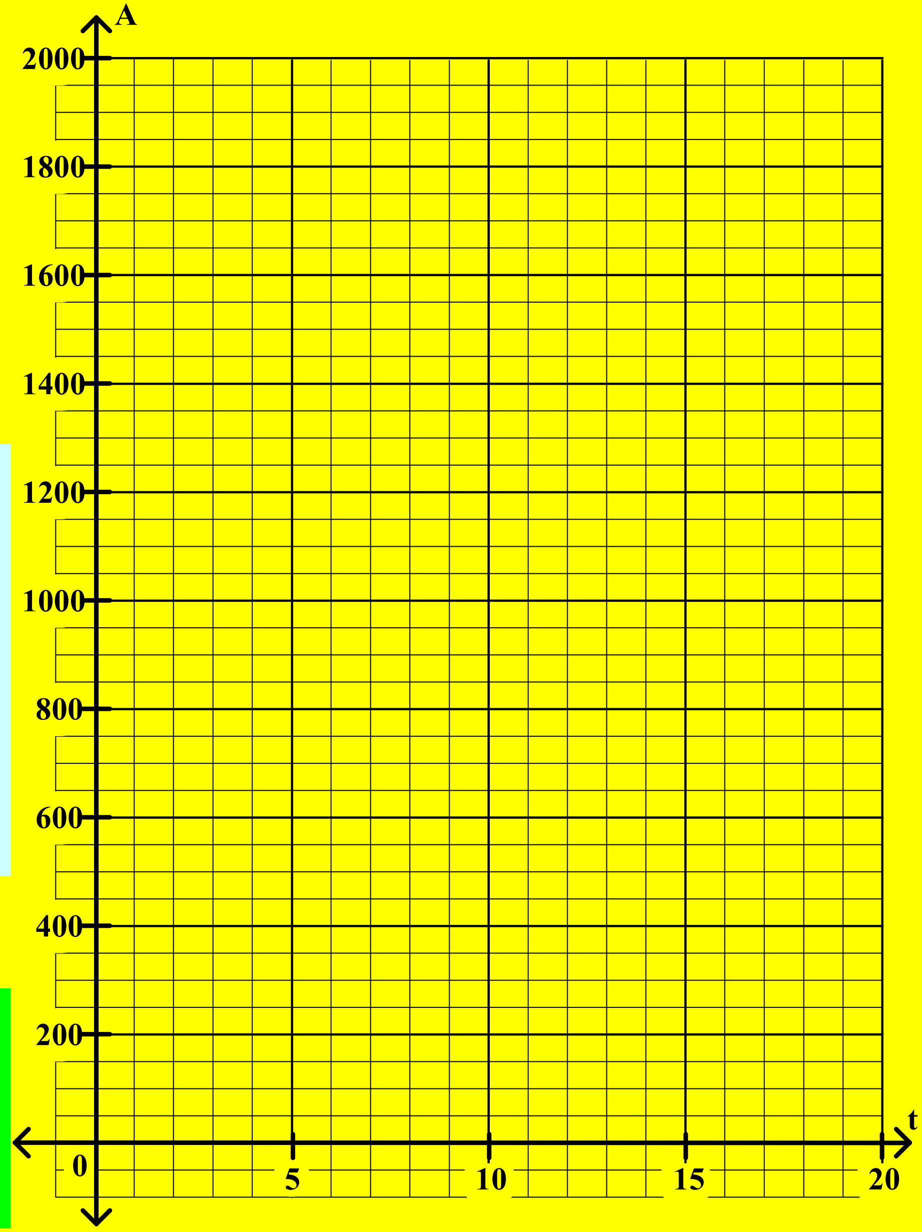

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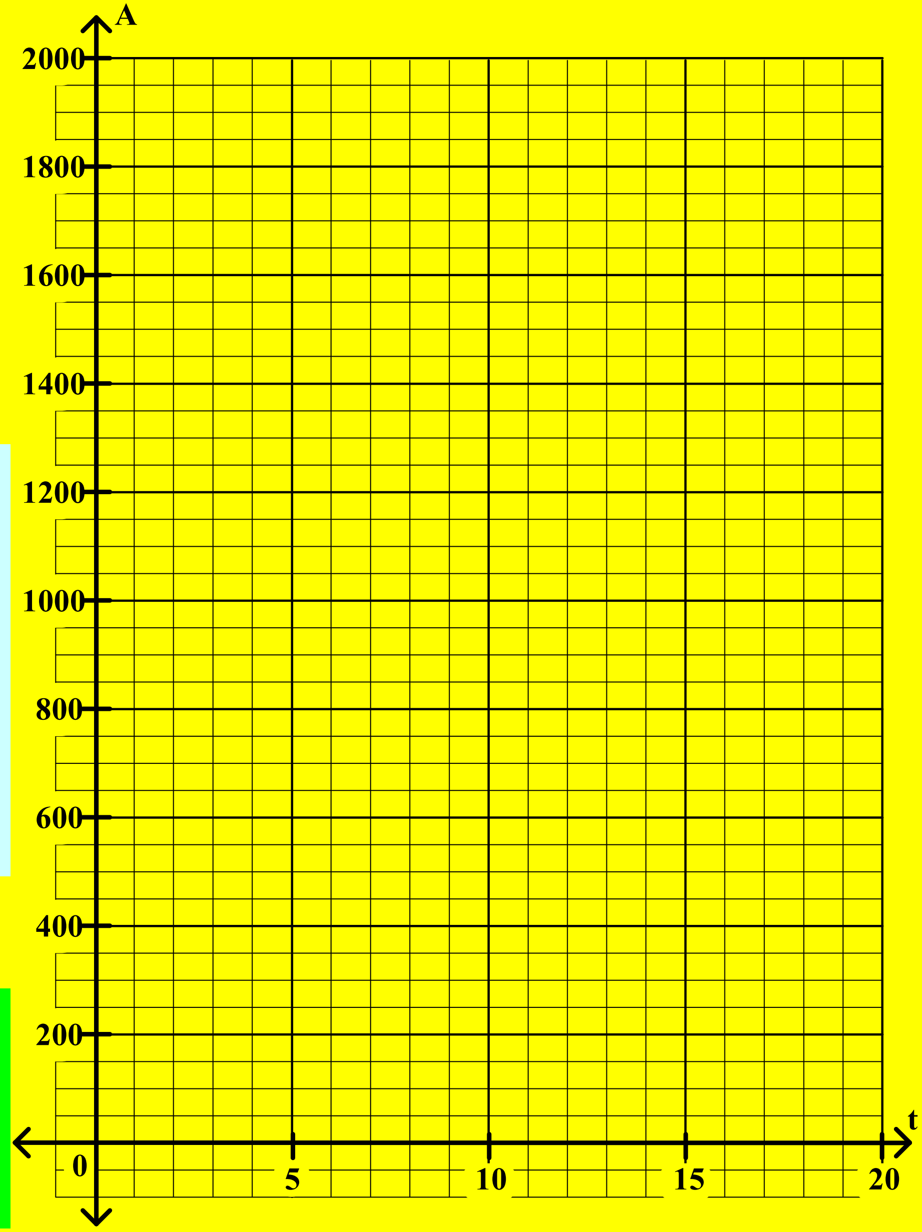

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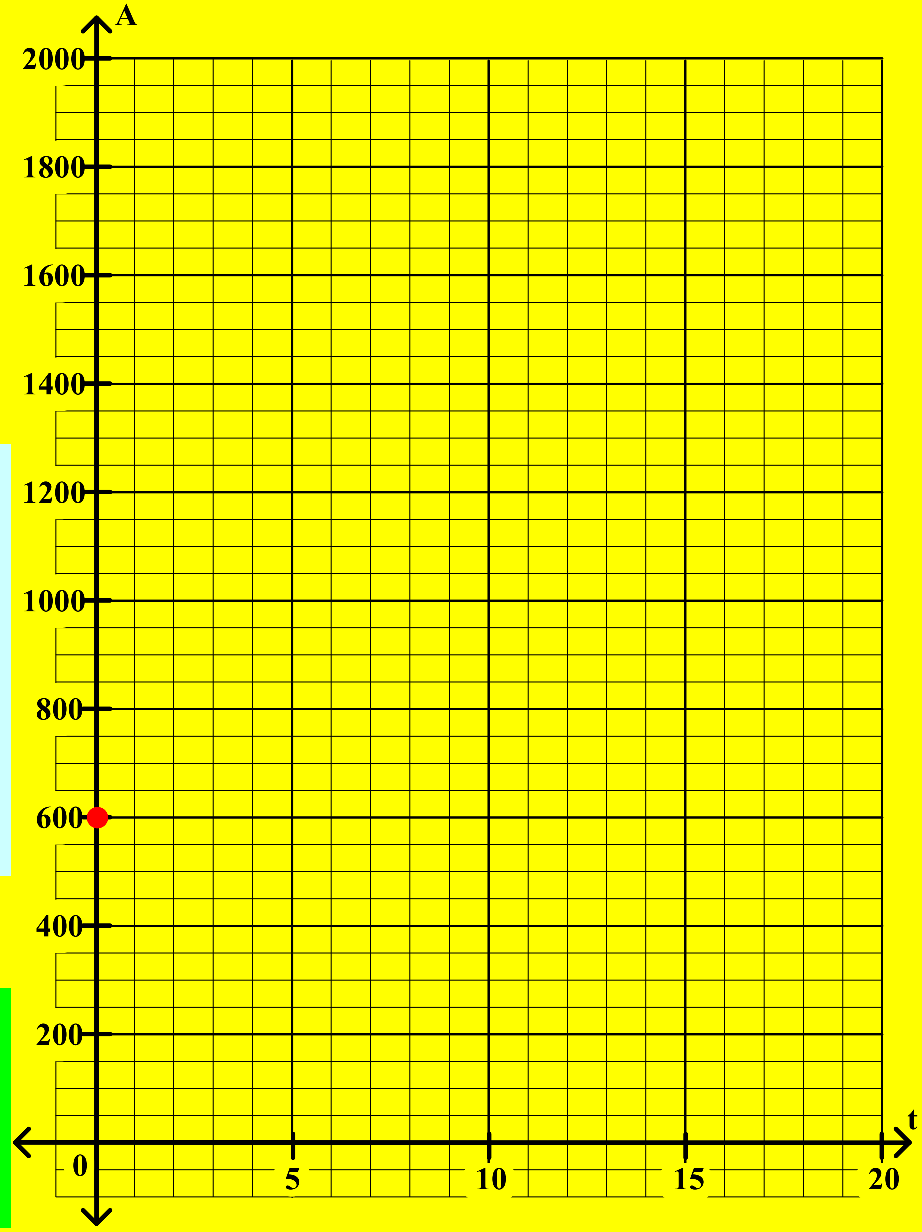

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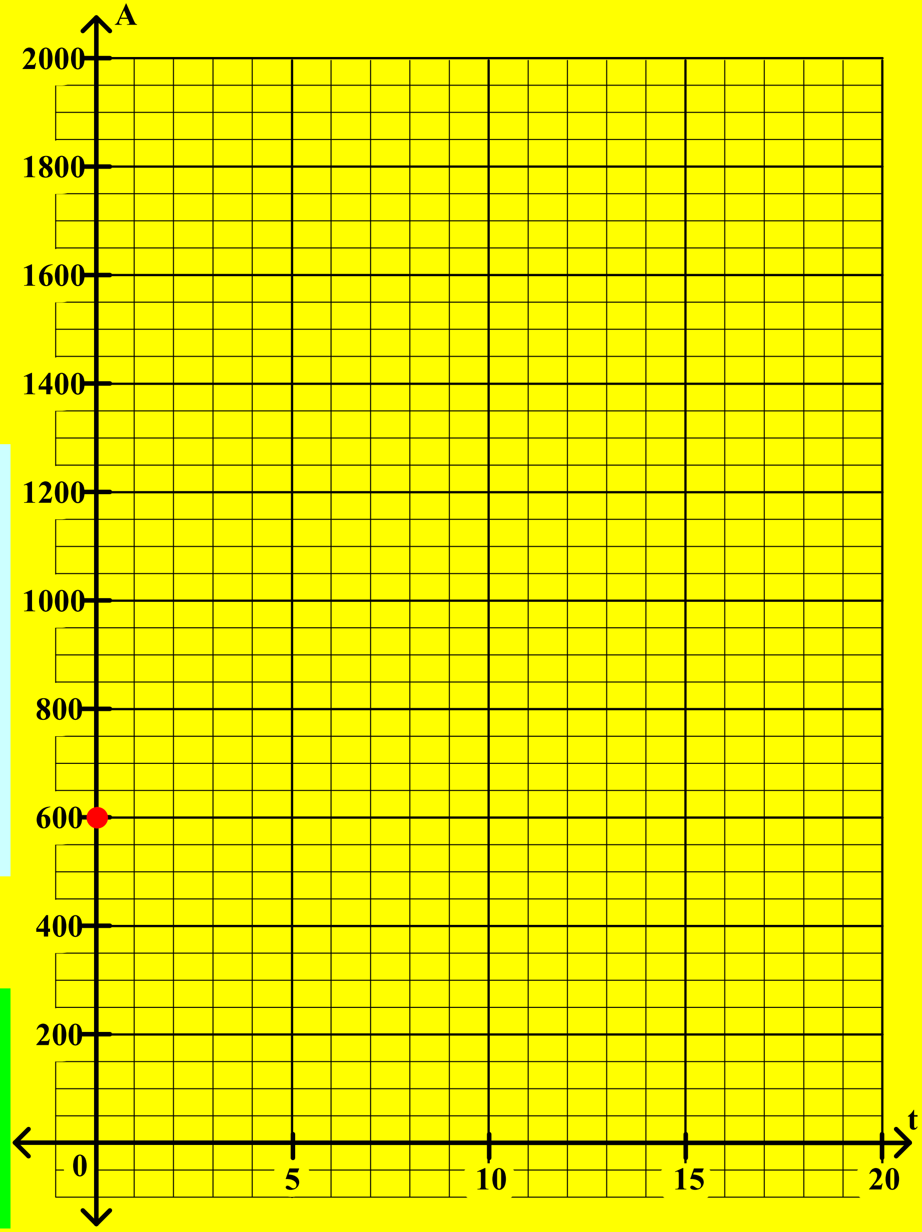

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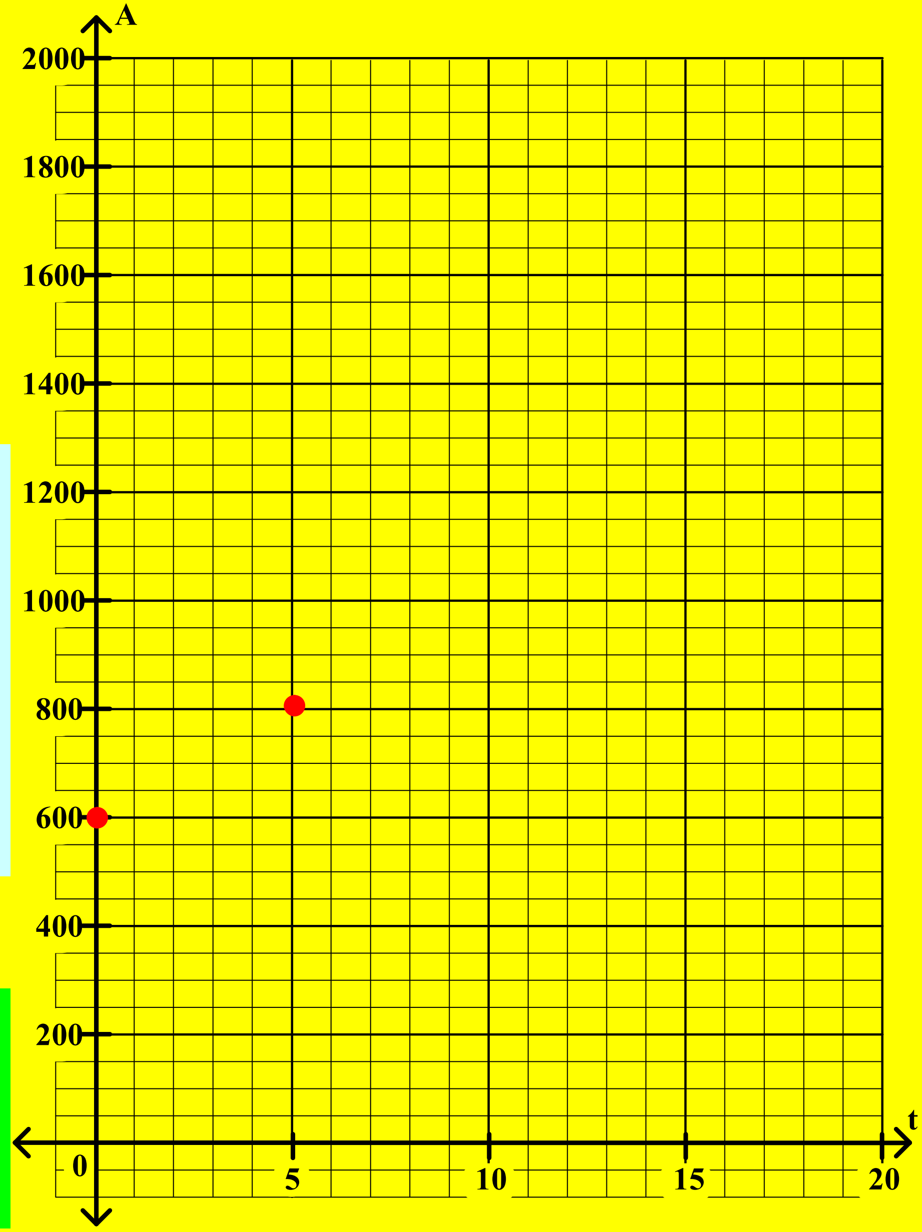

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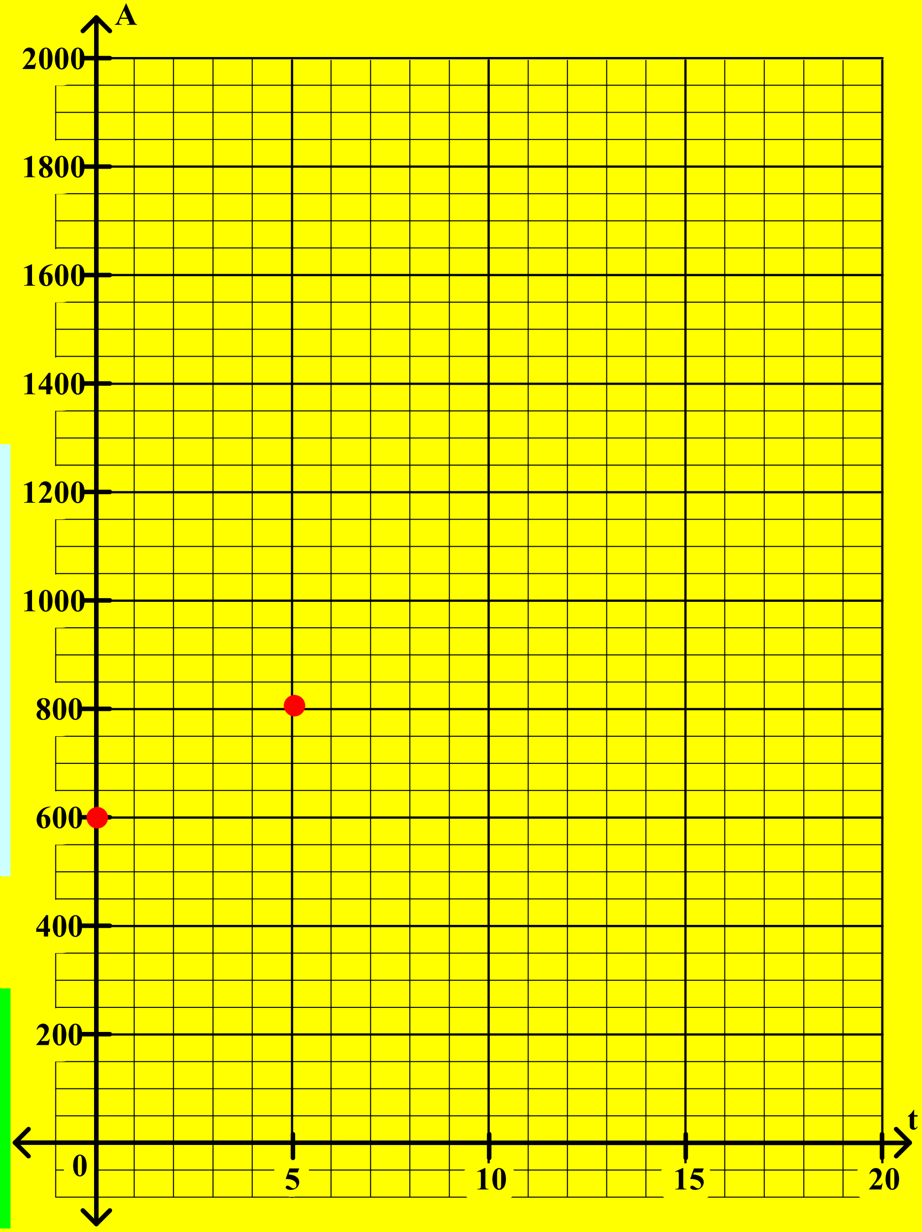

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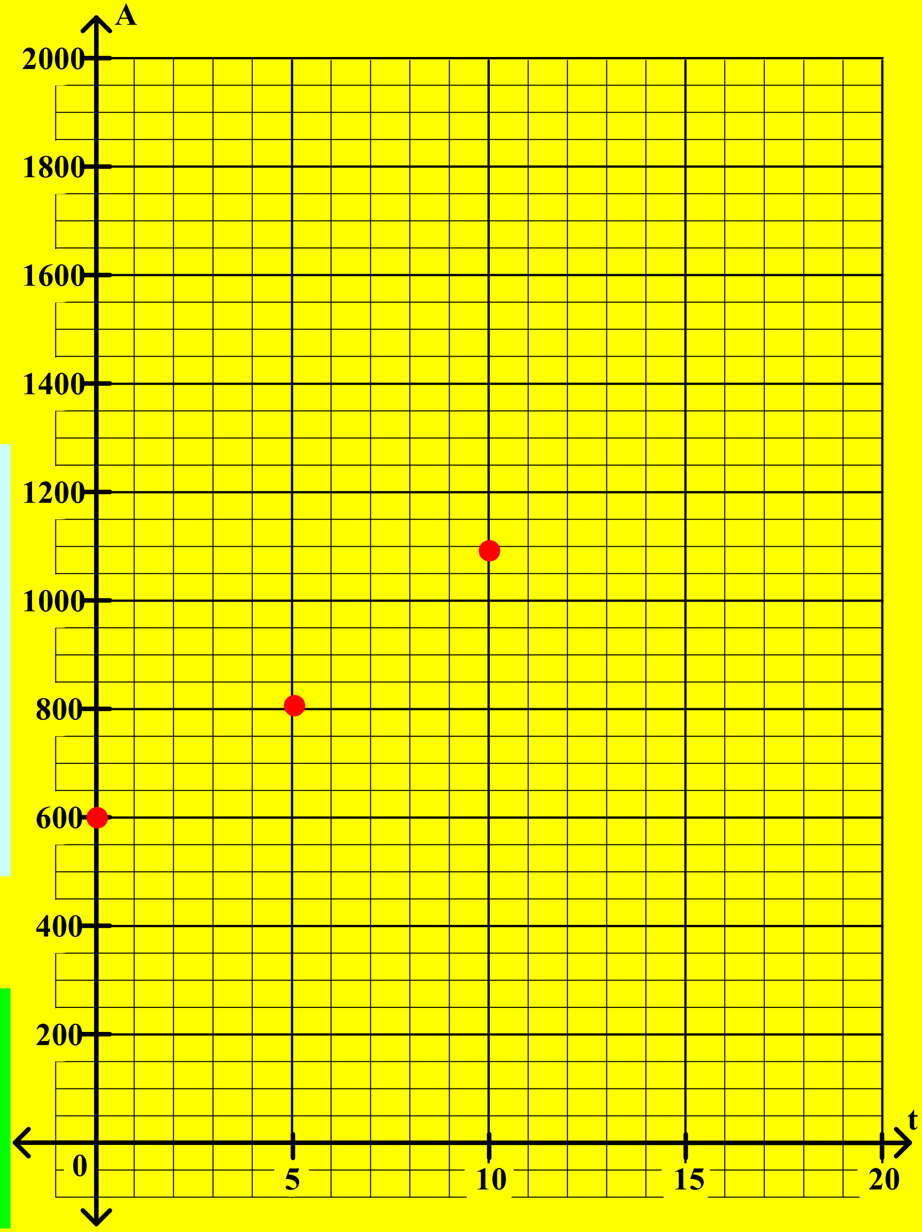

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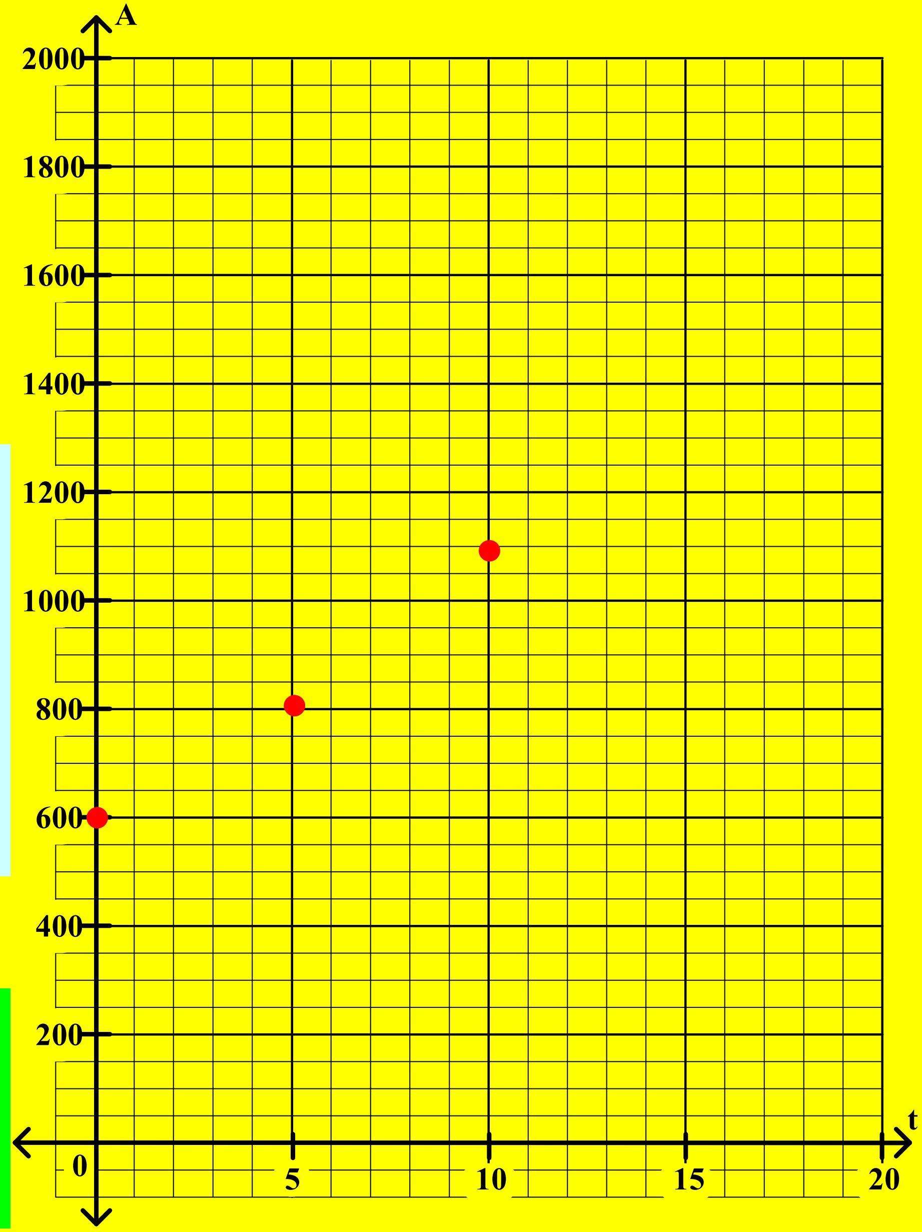

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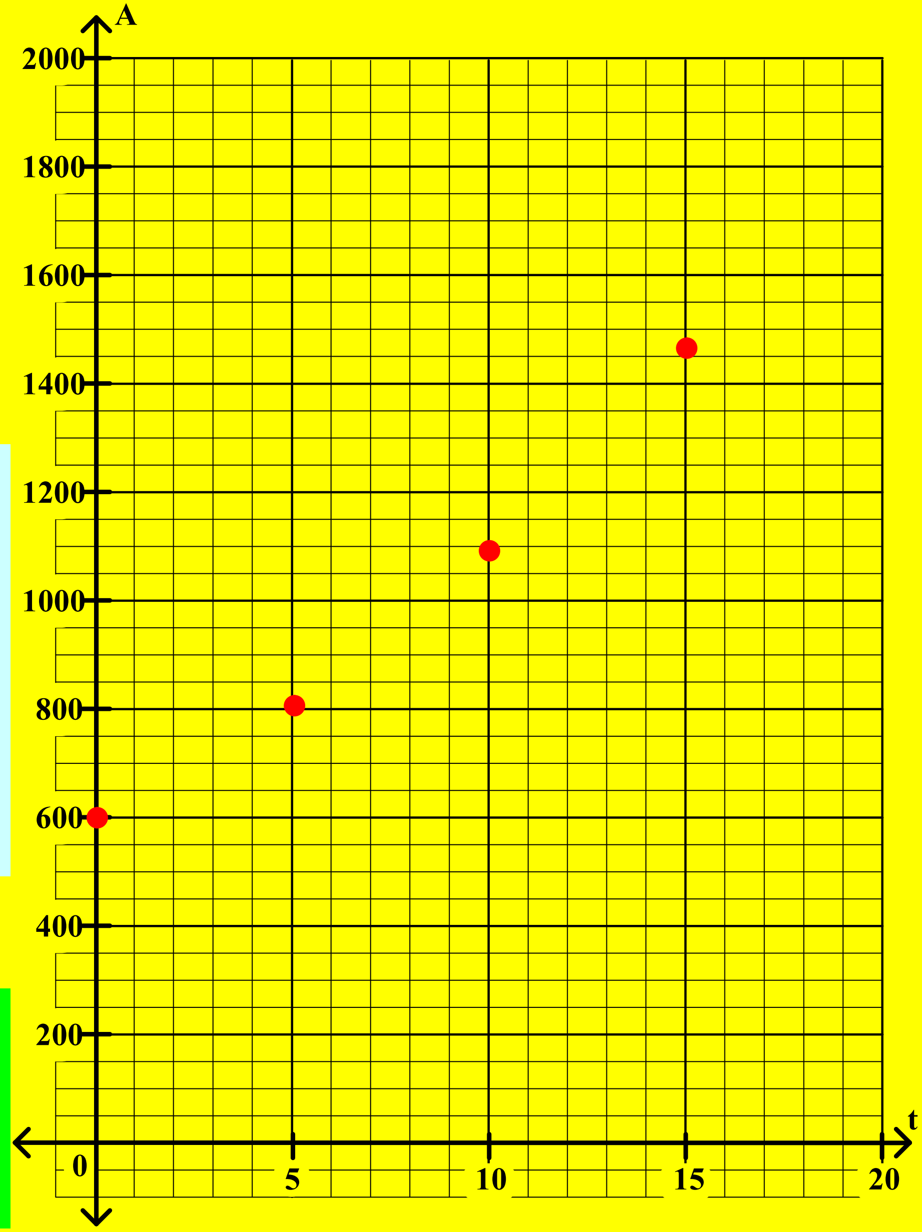

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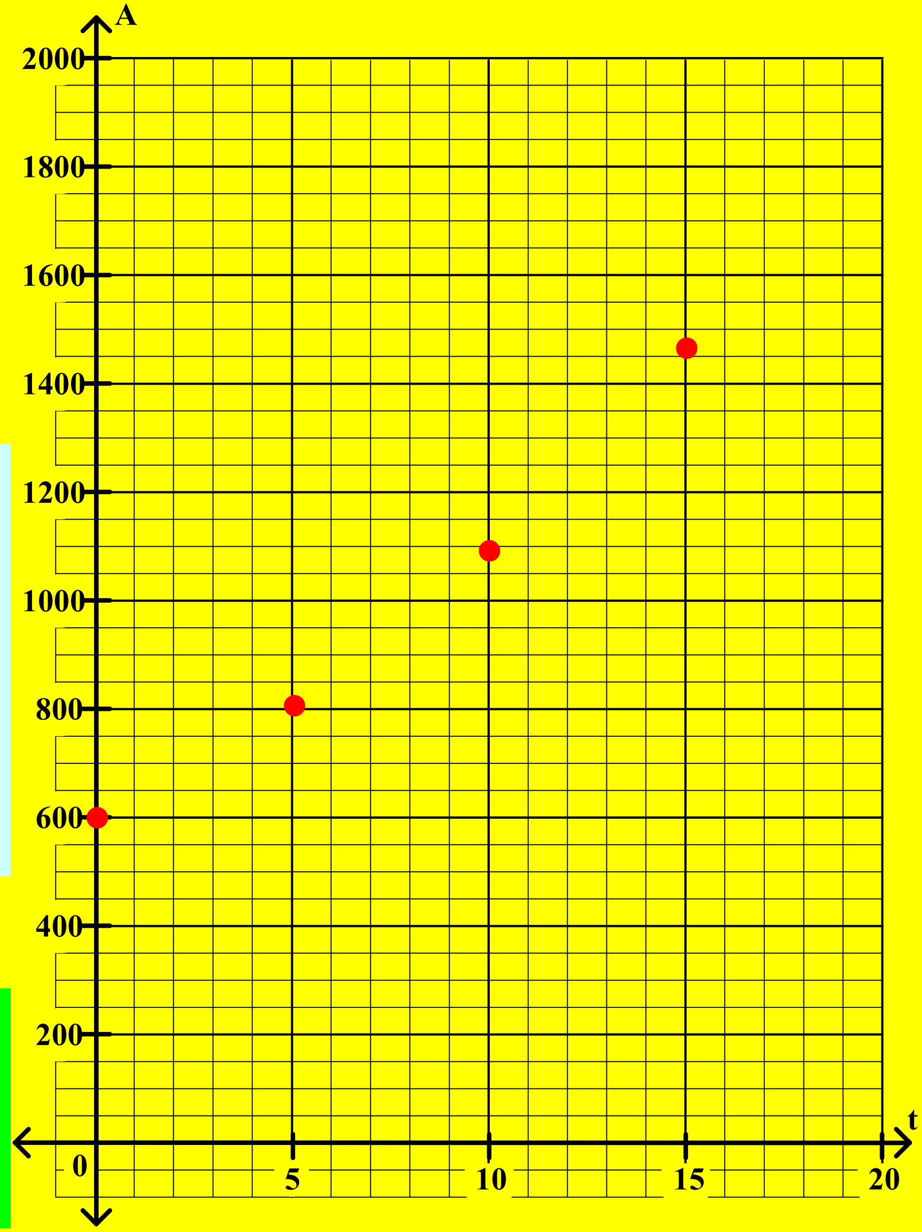

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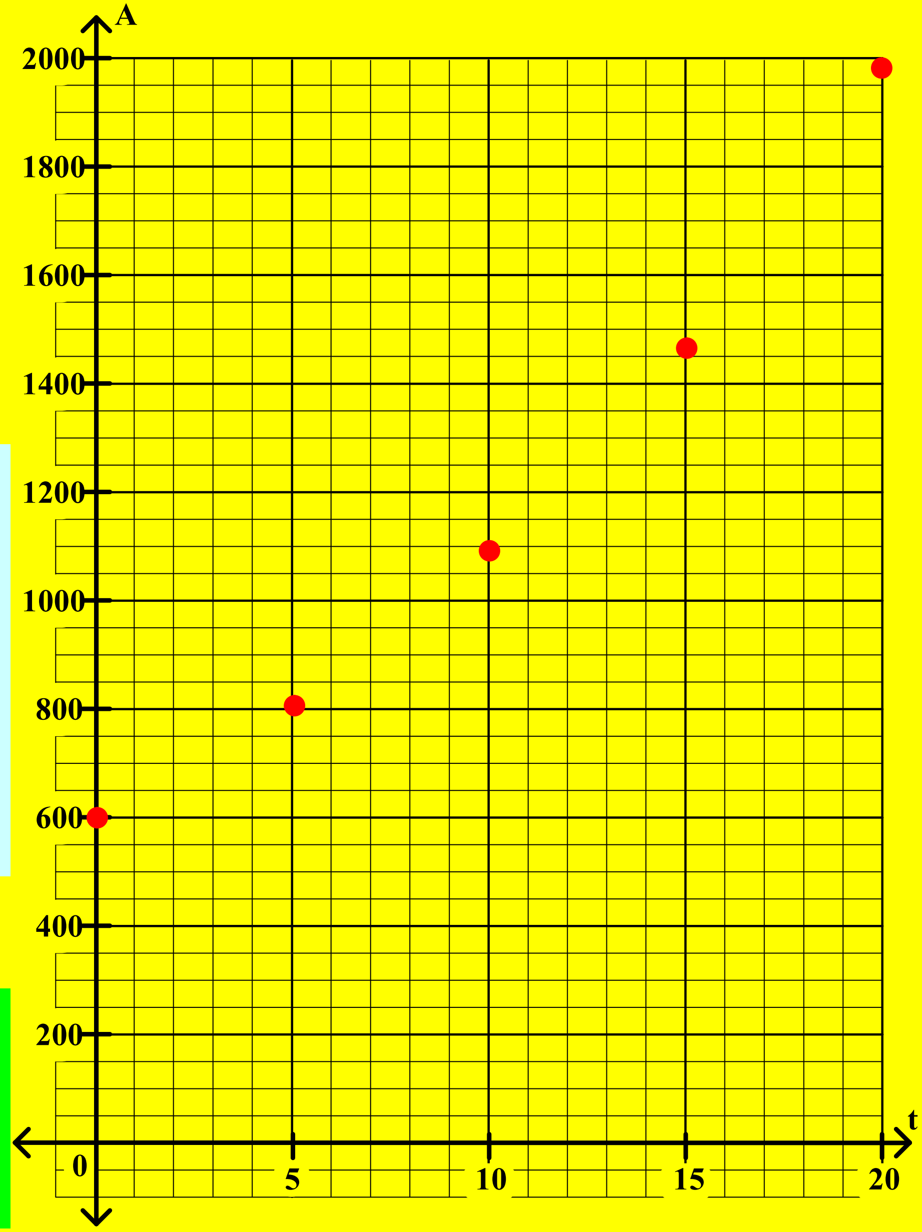

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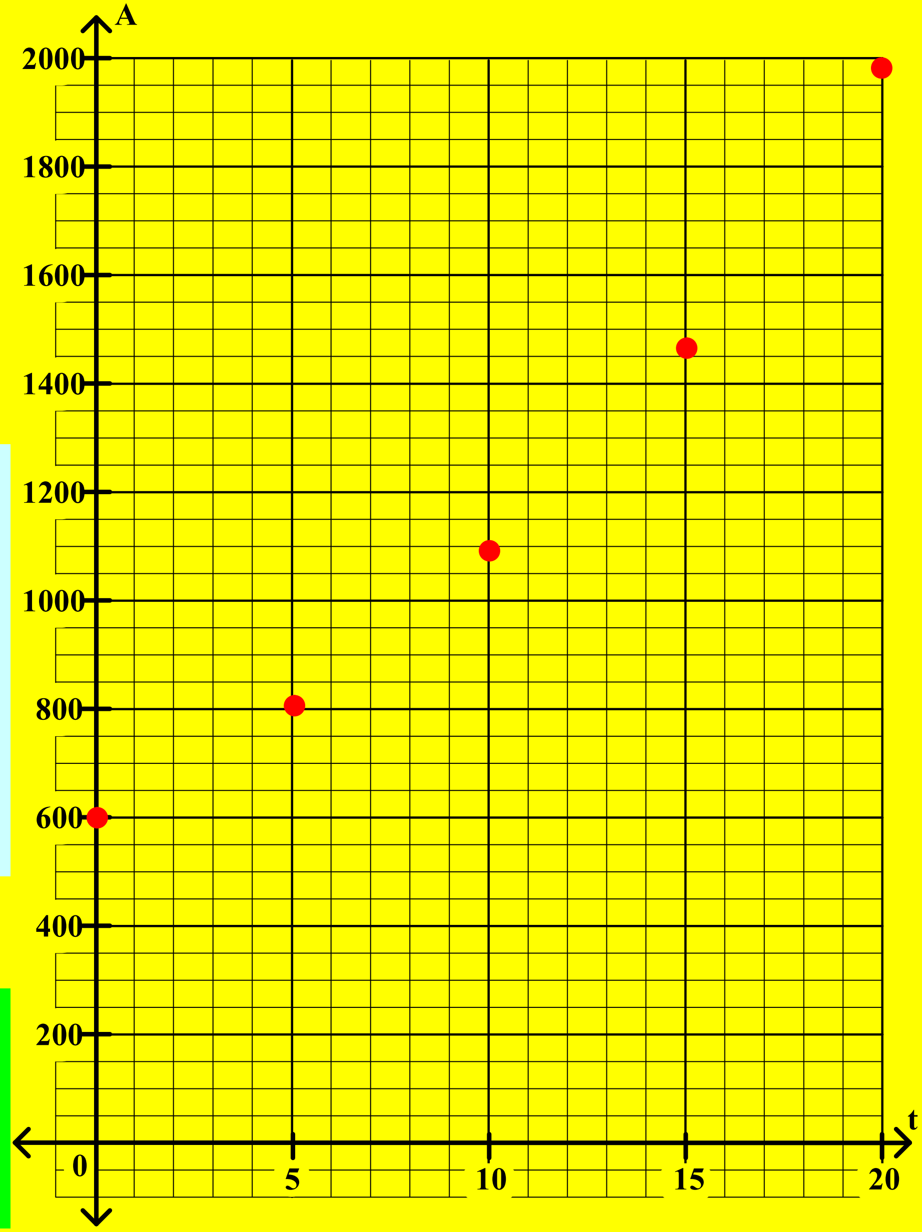

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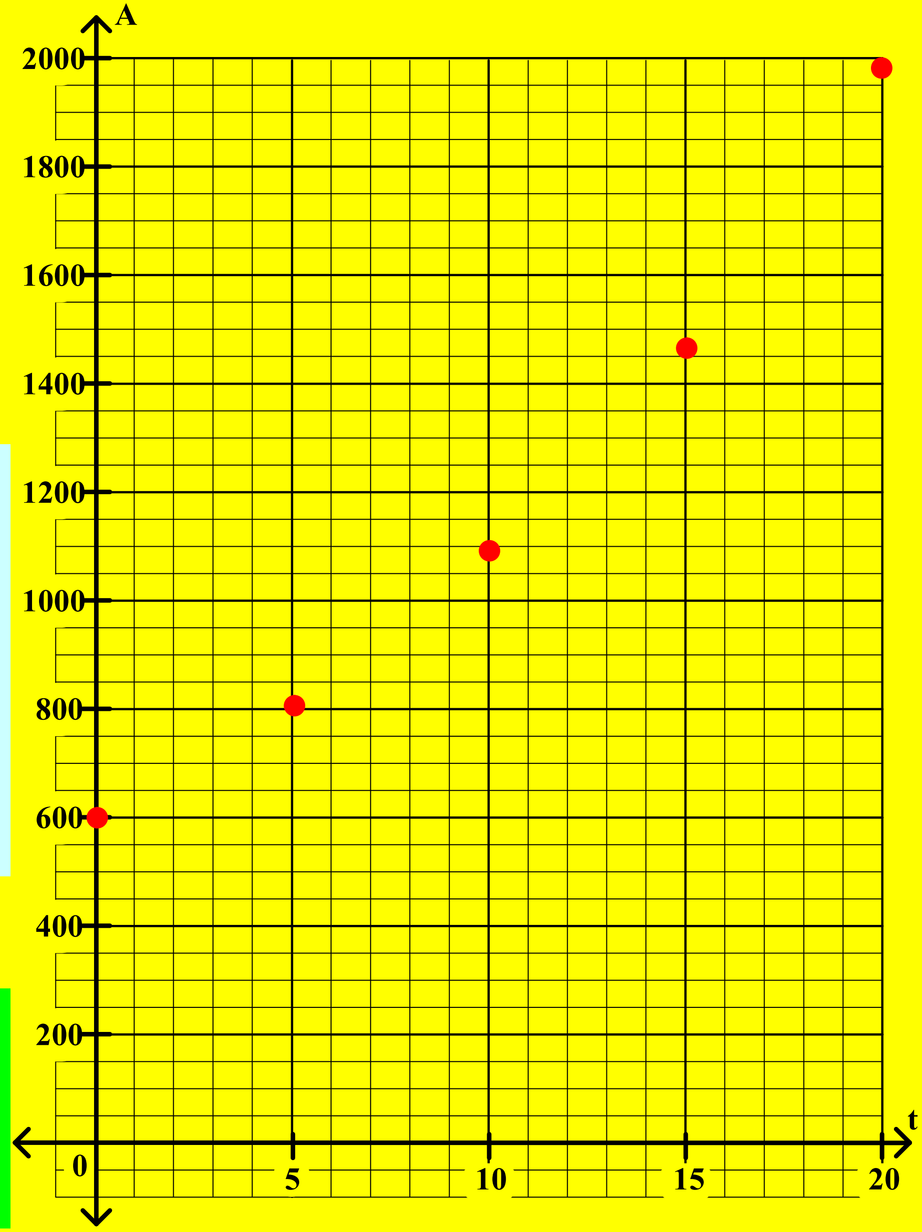

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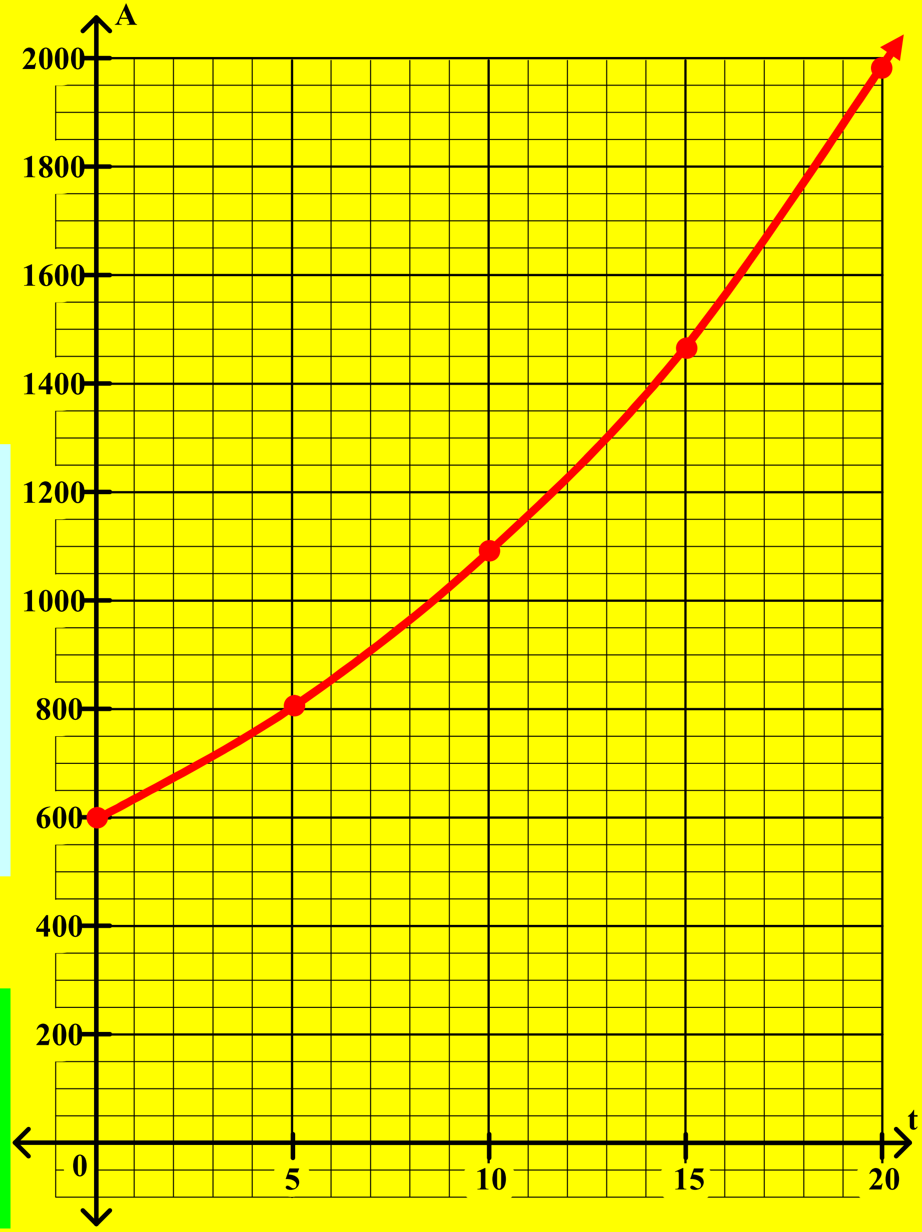

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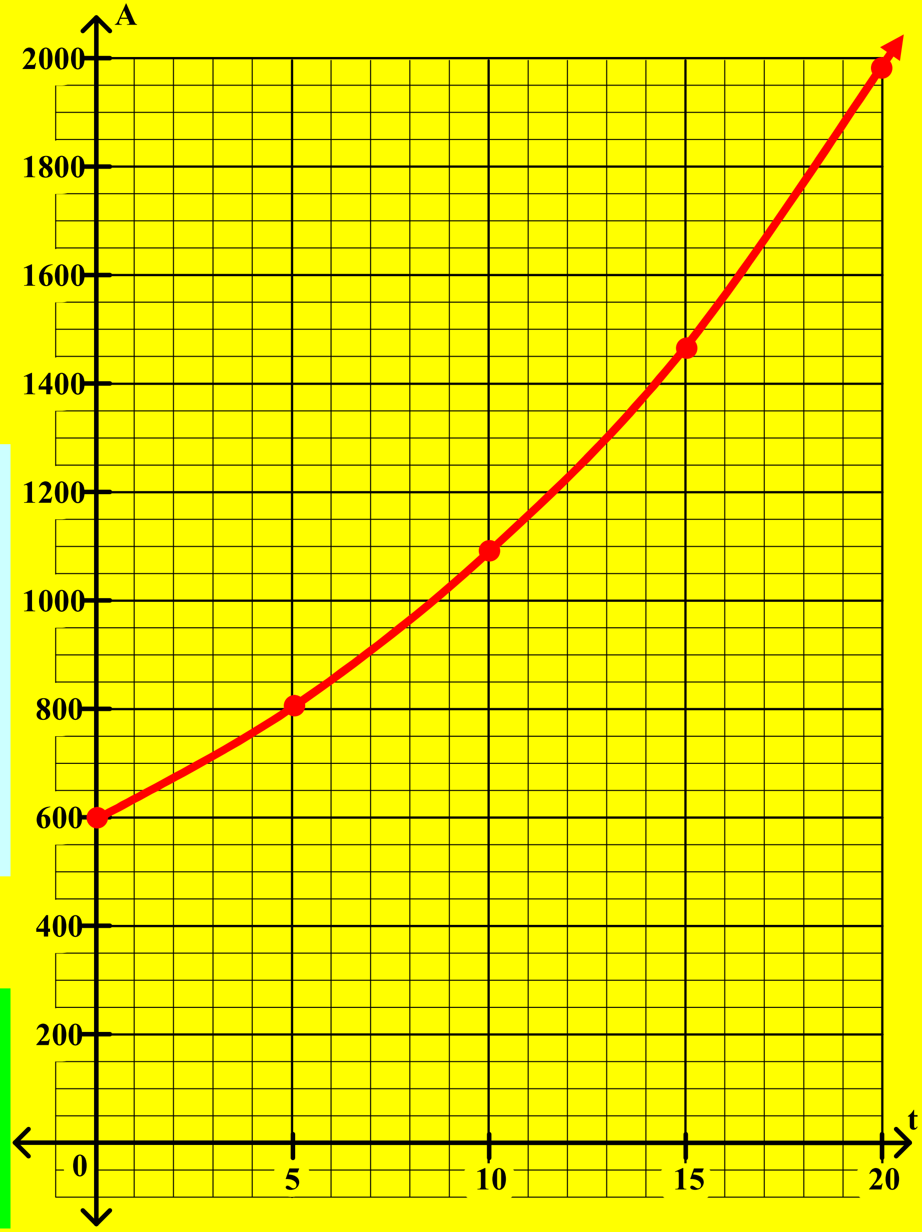

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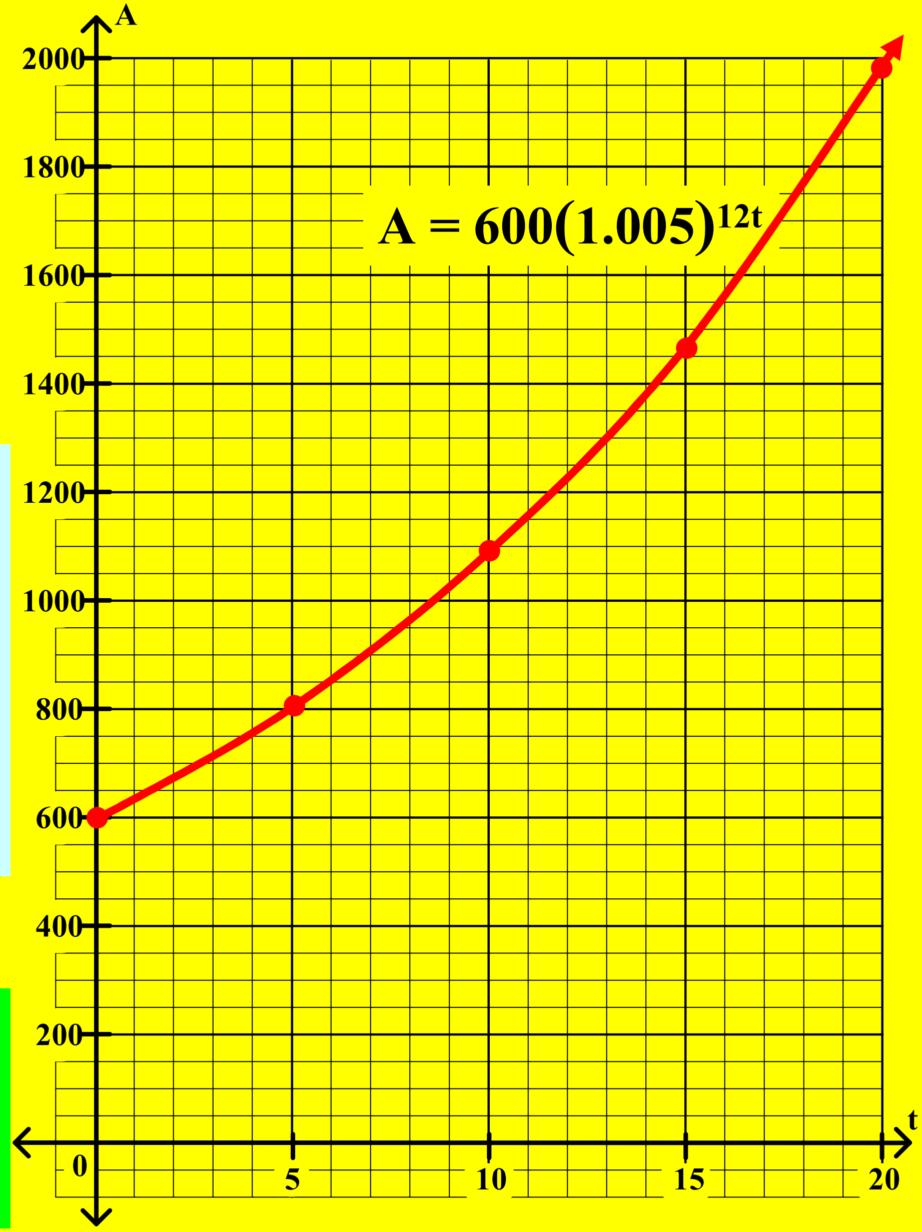

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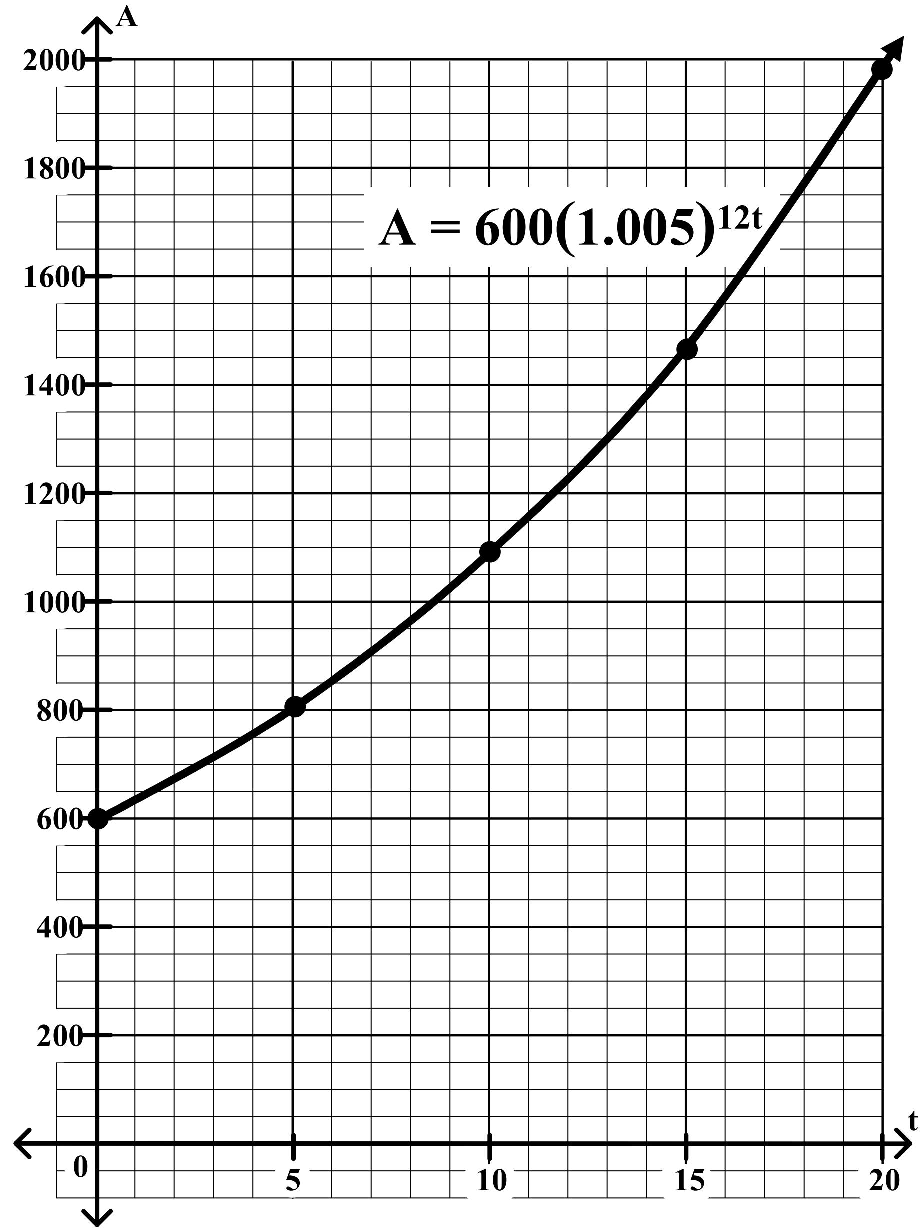
15	1472
20	1986



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t	Q

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t	Q
0	

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t	Q
0	1600

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t	Q
0	1600

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t	Q
0	1600

When t = 0, there are 1600 grams of the radioactive substance present.

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t	Q
0	1600
4	

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t	Q
0	1600
4	800

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0	1600
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8	400

When t = 8 (years), half of the remaining radioactive substance has decayed.

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4	800
8	400

When t = 8 (years), half of the remaining radioactive substance has decayed. There are now 400 grams of the radioactive substance present.

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When t = 8 (years), half of the remaining radioactive substance has decayed. There are now 400 grams of the radioactive substance present. Once again, the 400 grams which have 'decayed' have not disappeared. They have simply change into a more stable substance. (This may help to explain why the apparent rate of decay has decreased.)

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t	Q
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This will continue. With each additional four year time period, one-half of the remaining radioactive substance will 'decay'.

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12	

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16	

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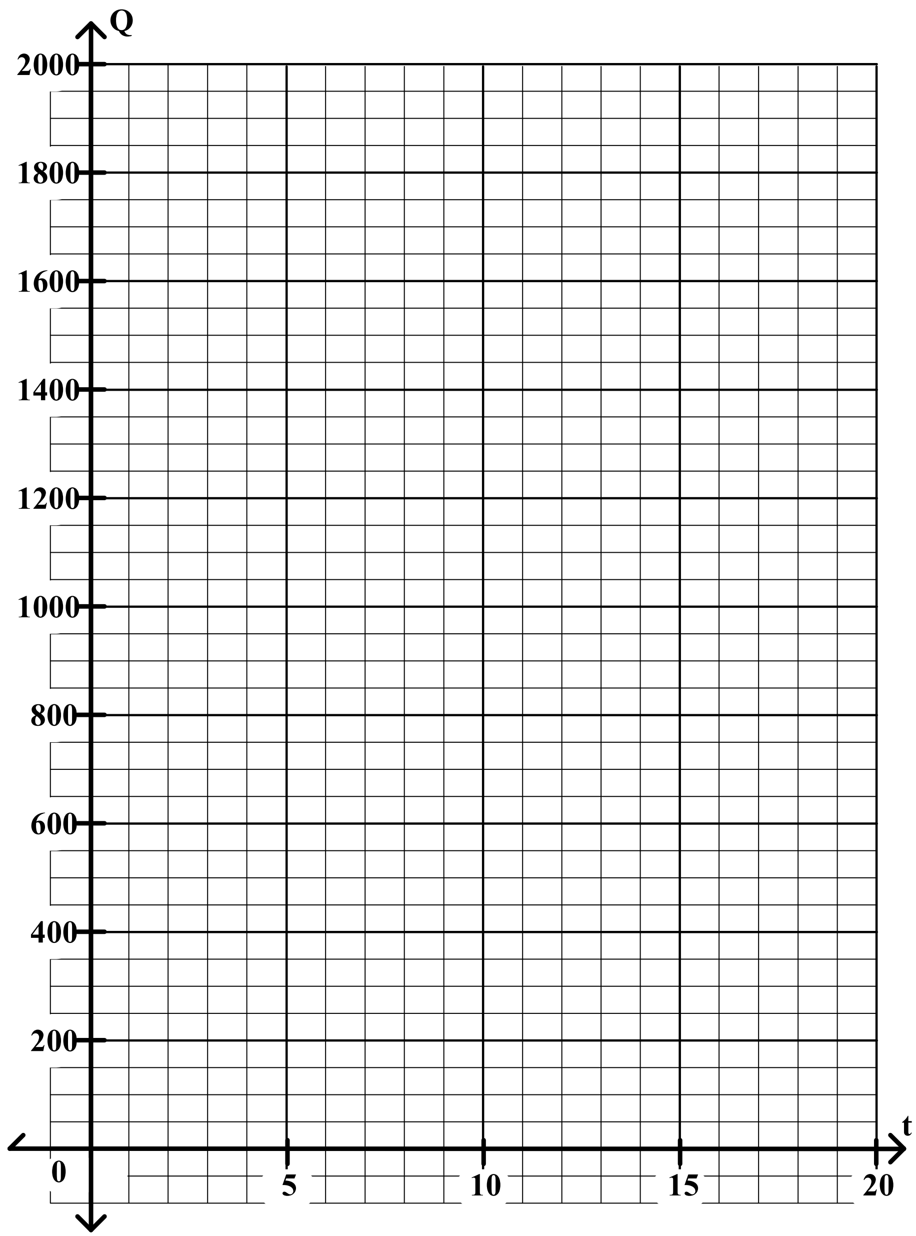

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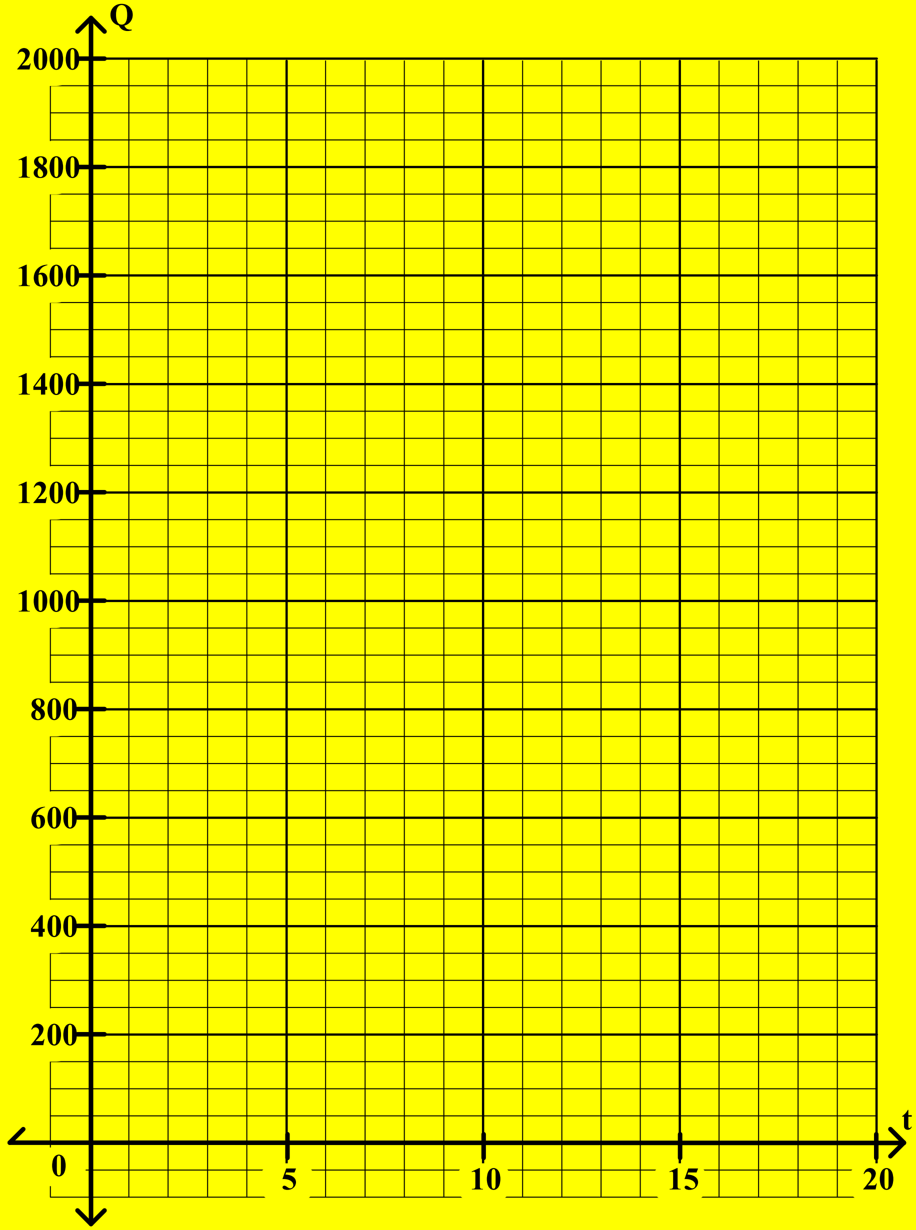

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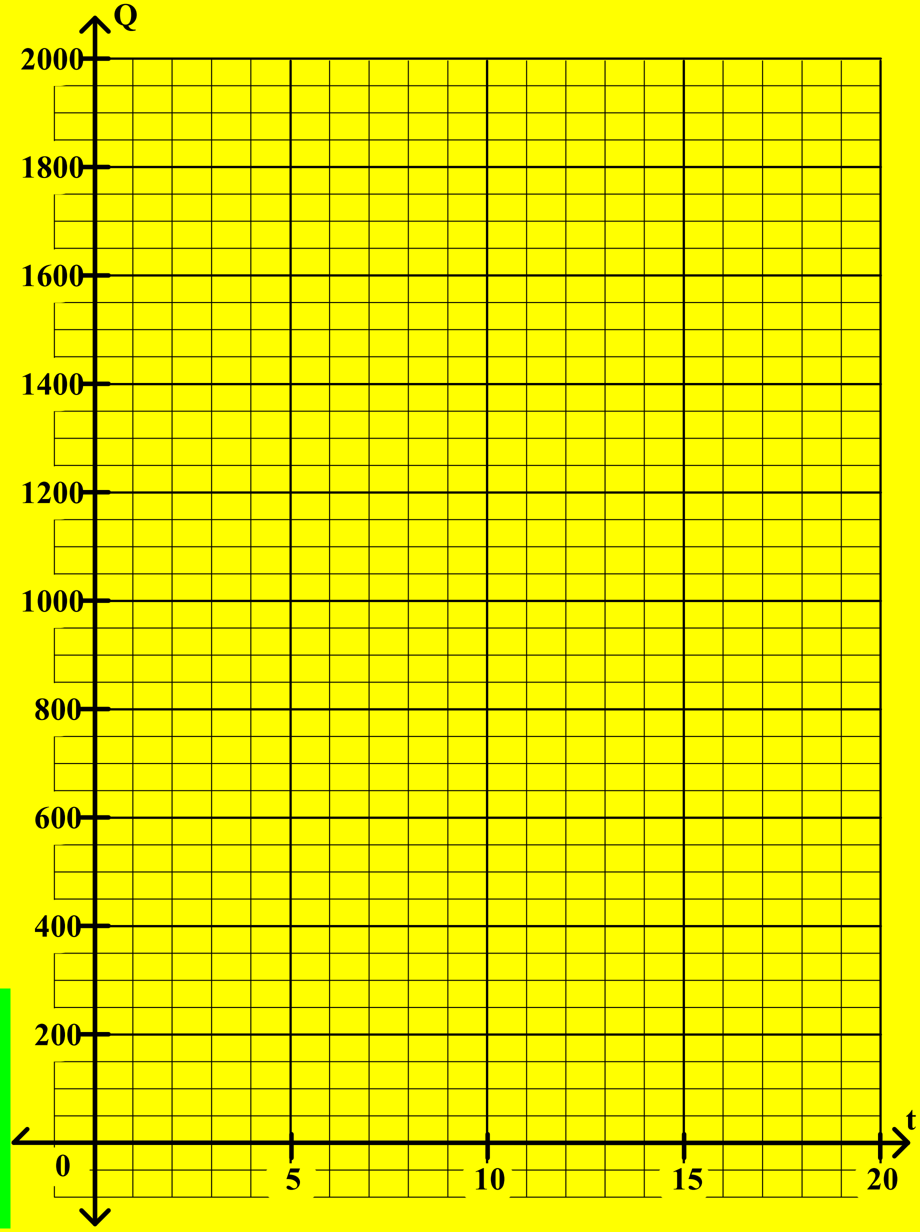

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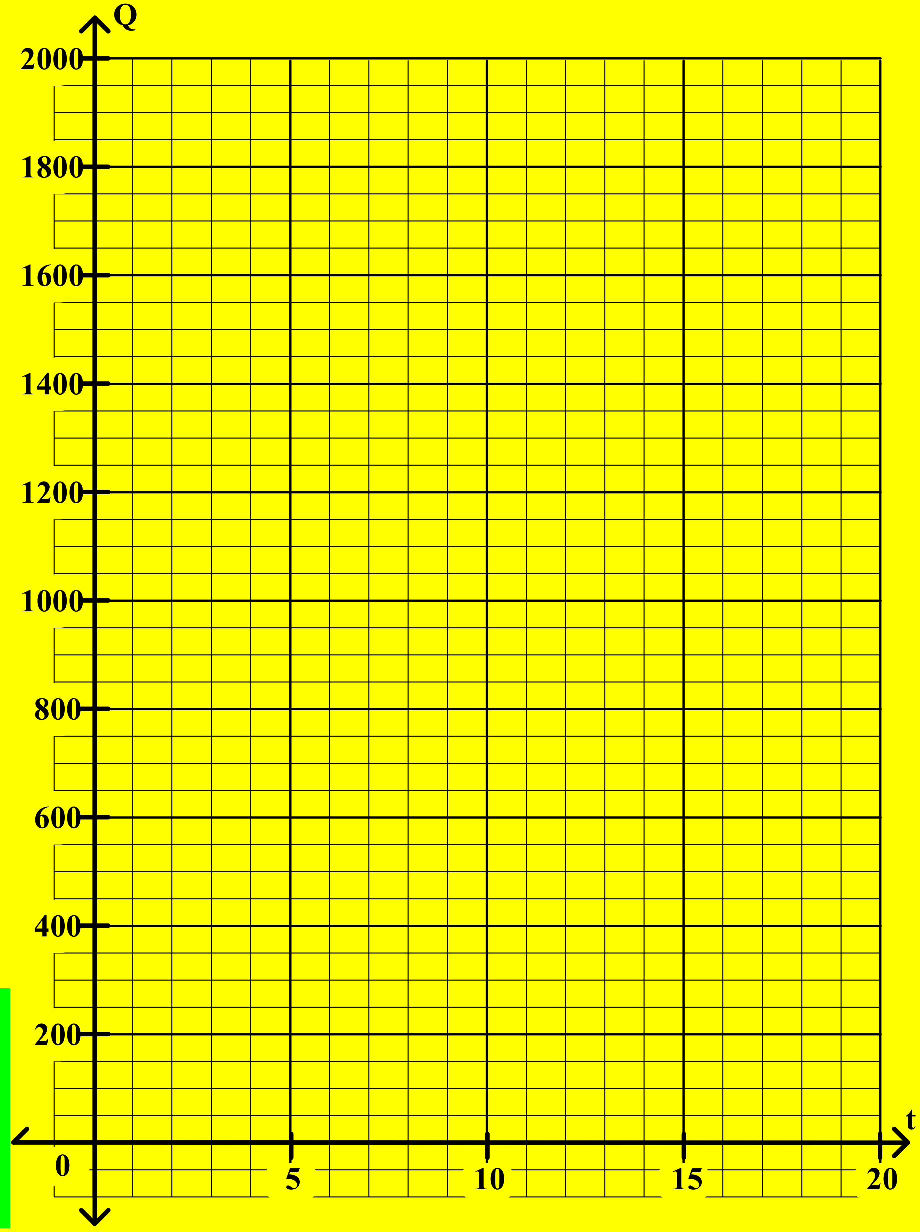

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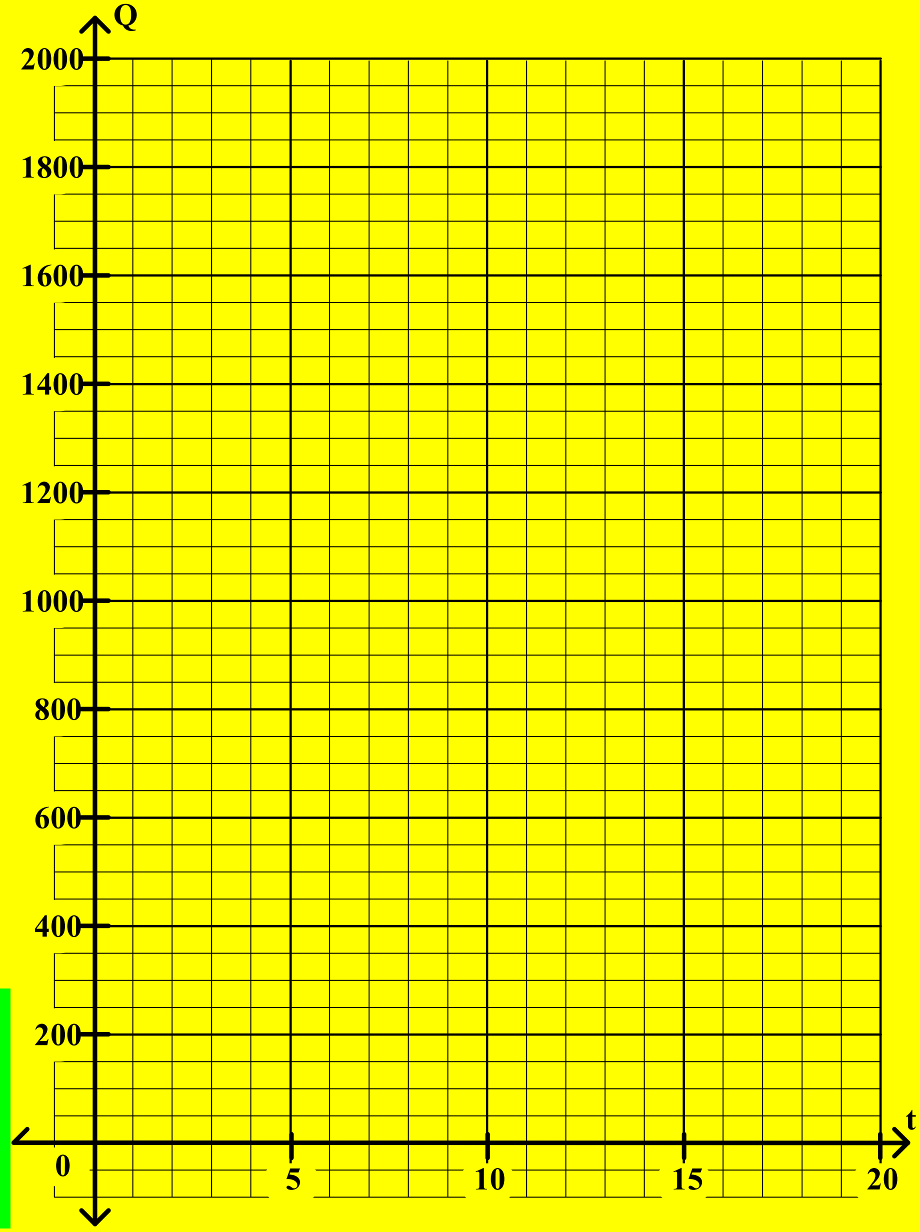

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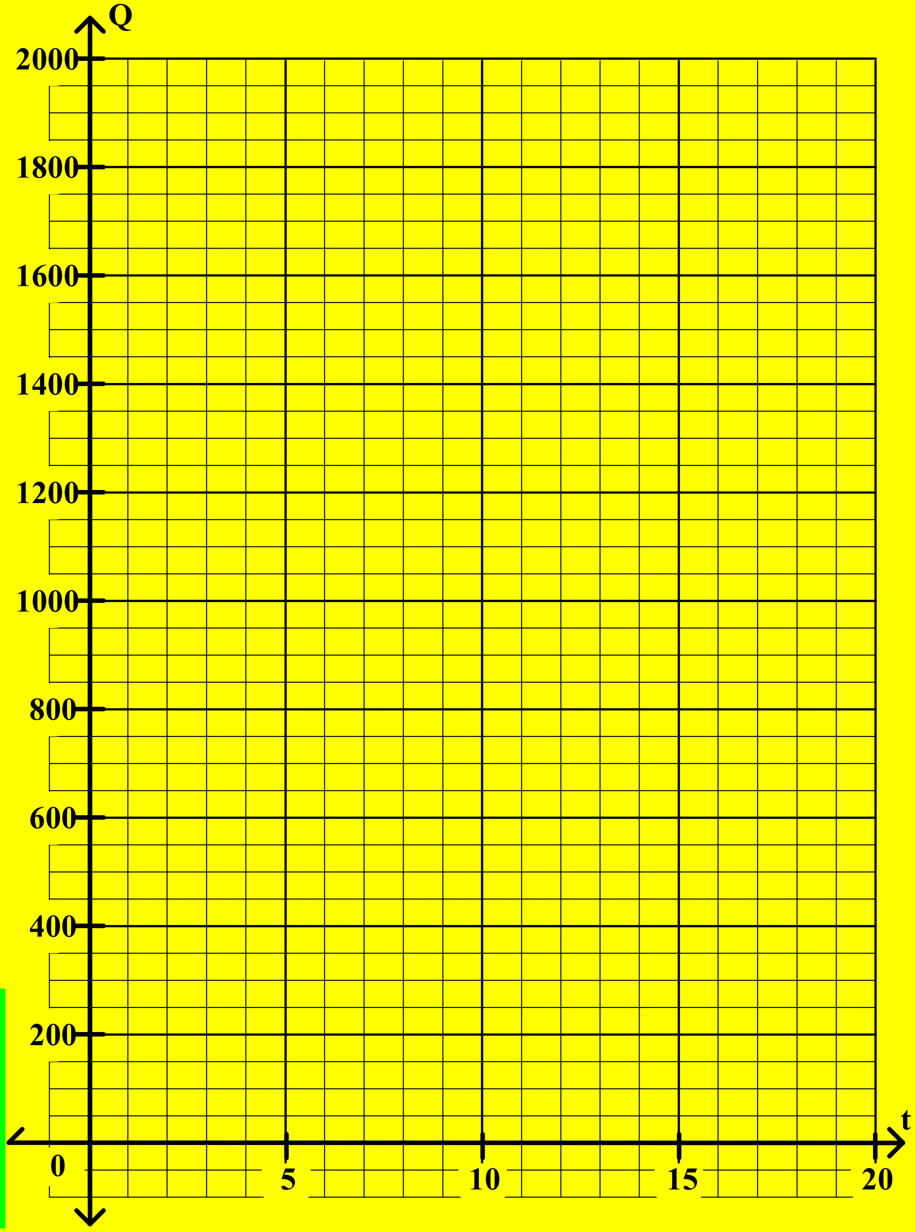

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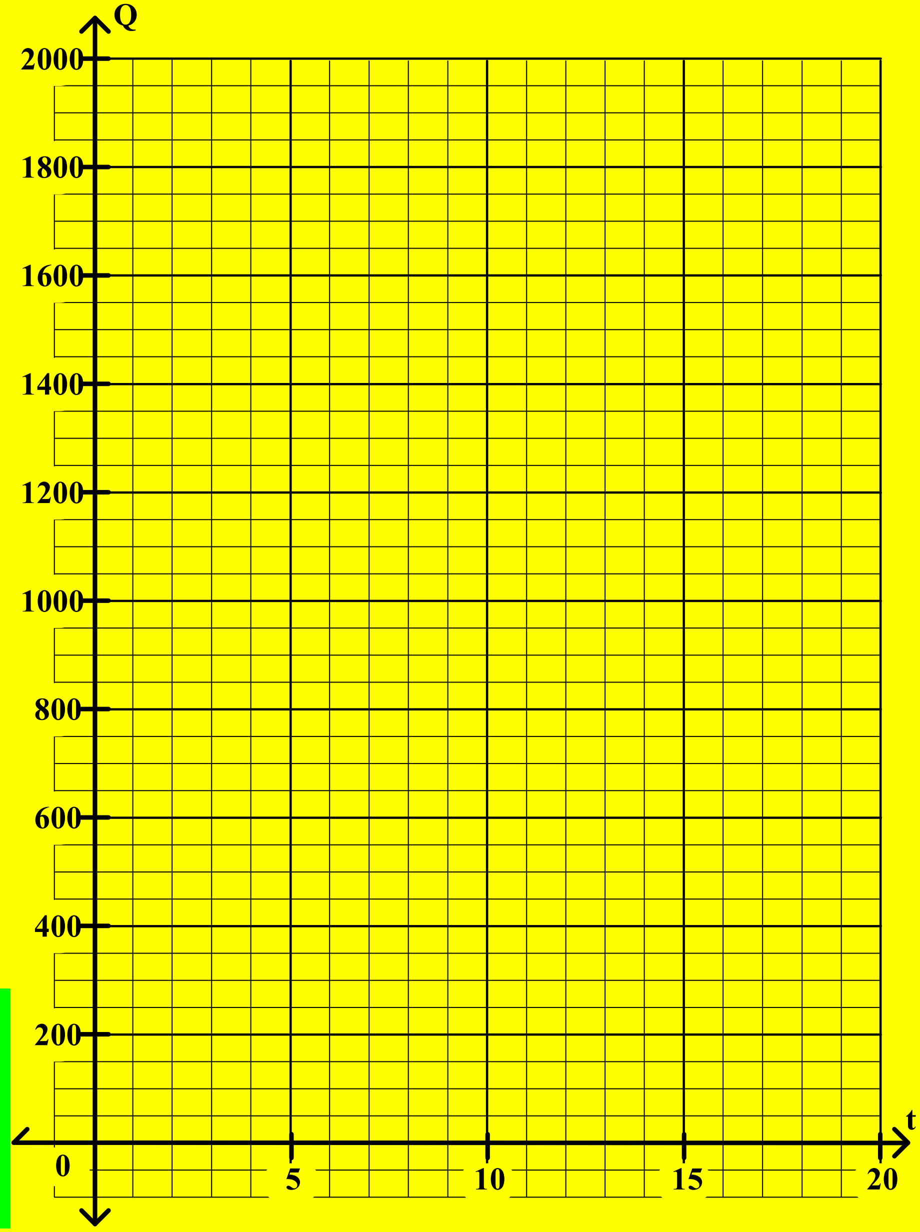

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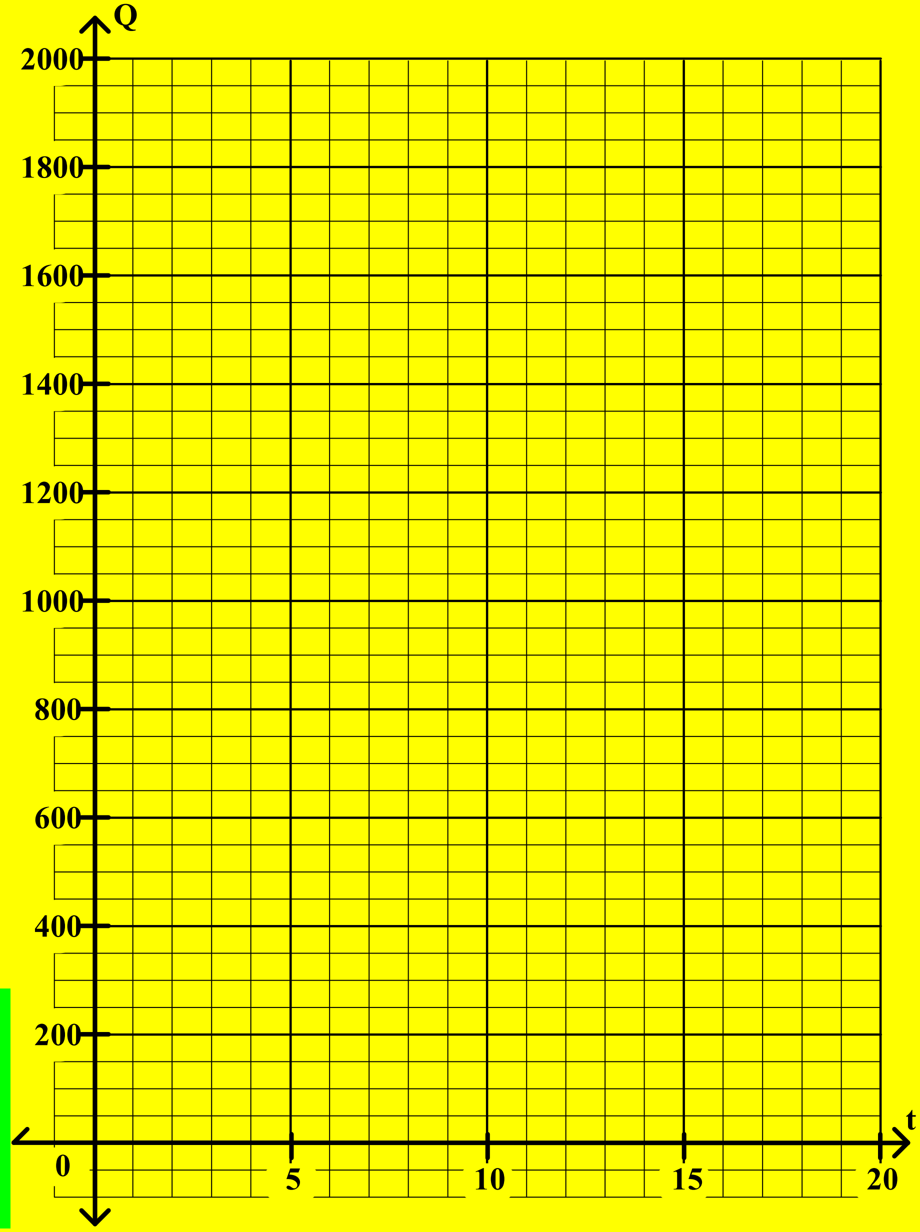

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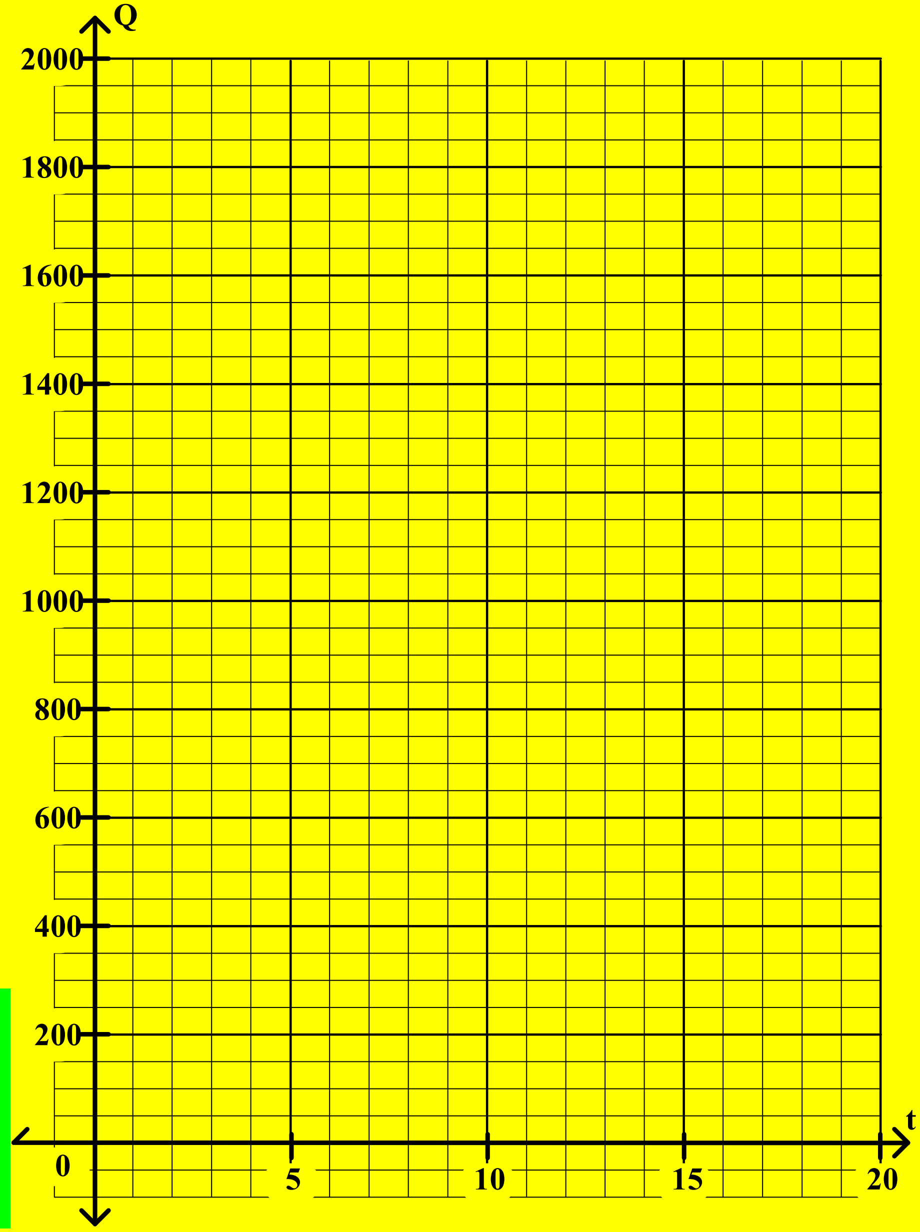

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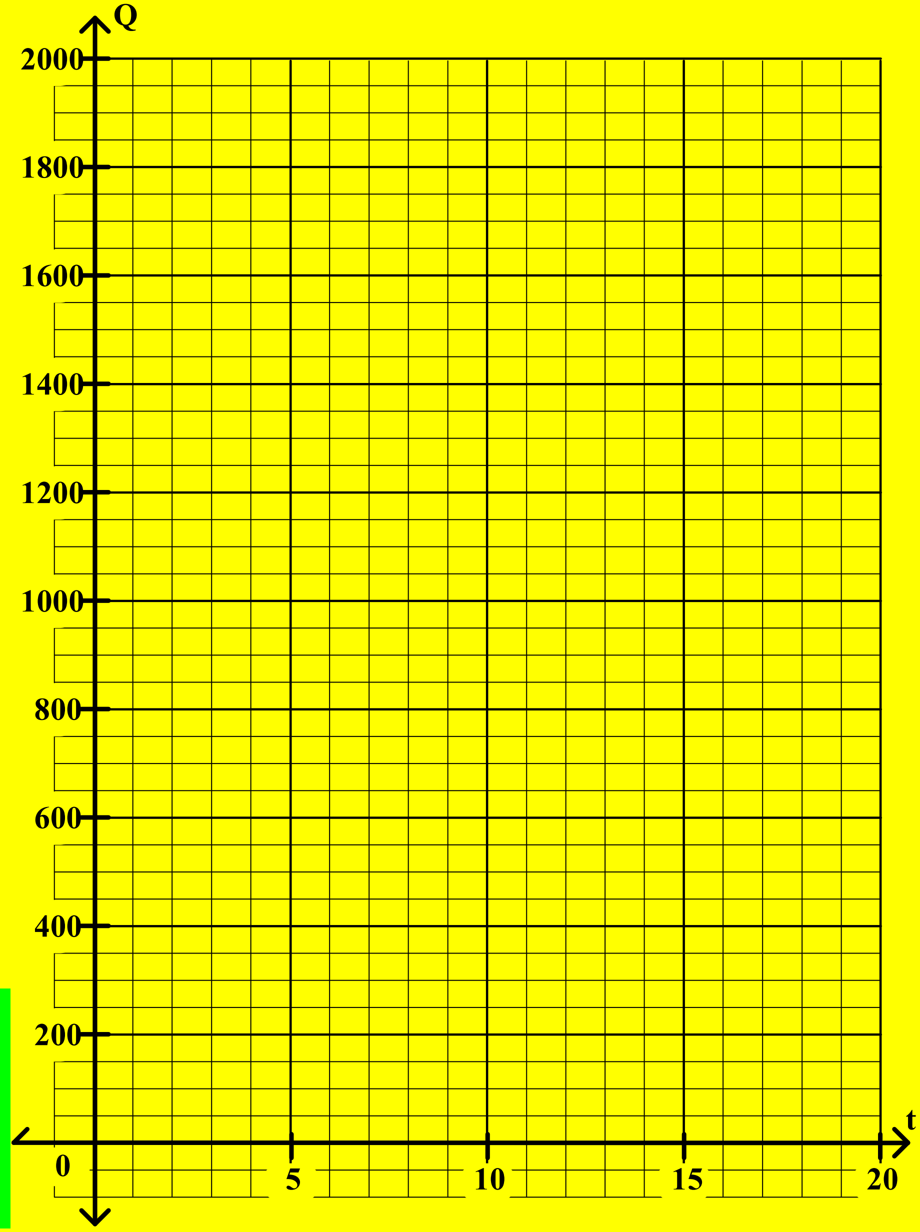

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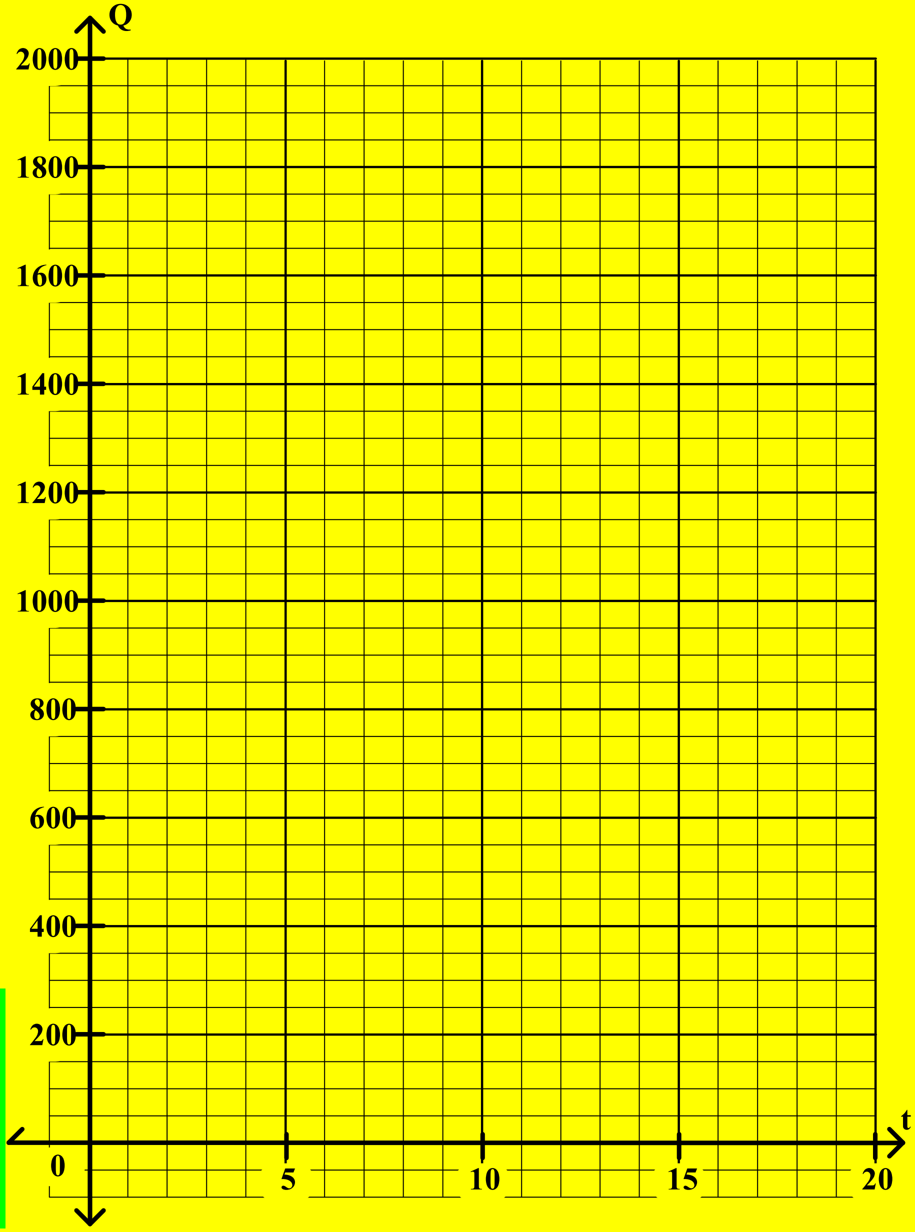

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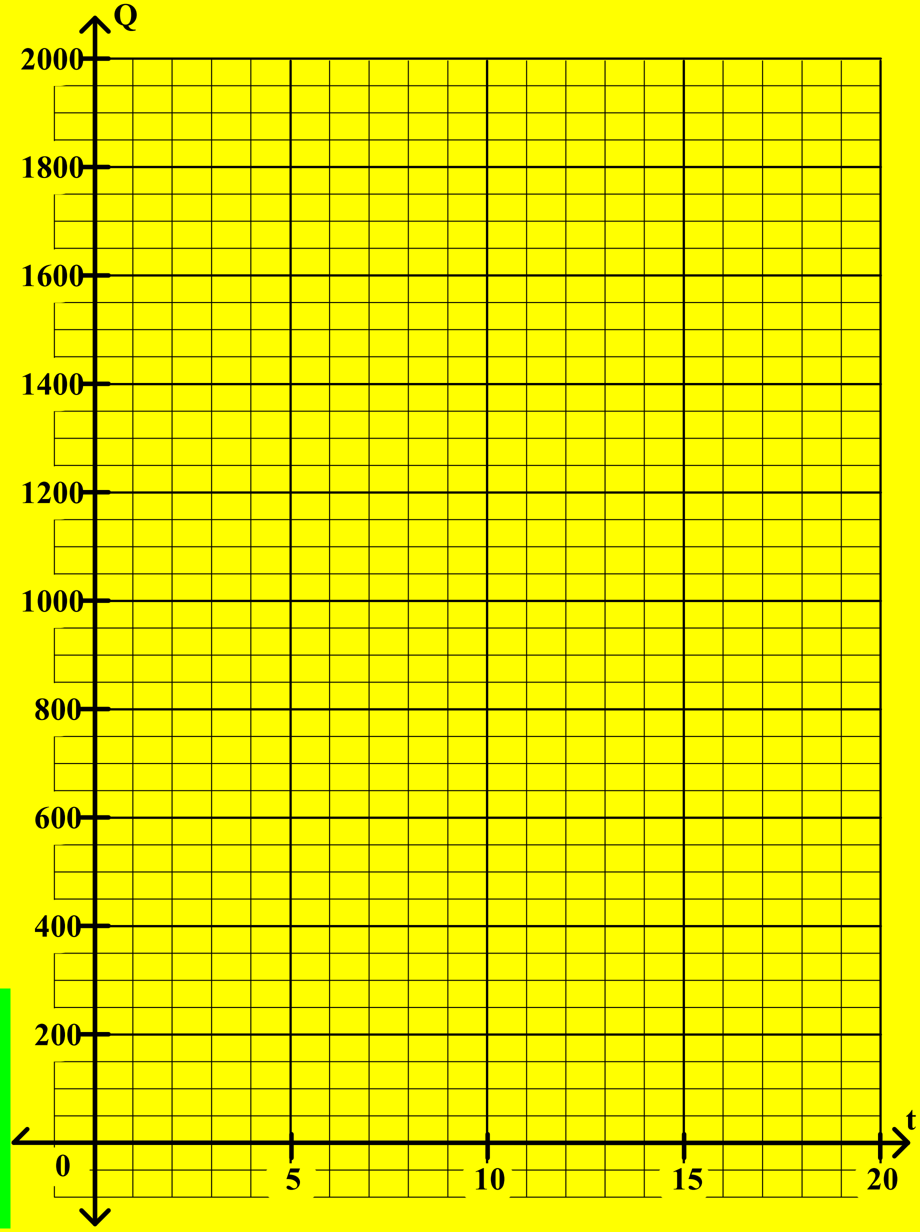

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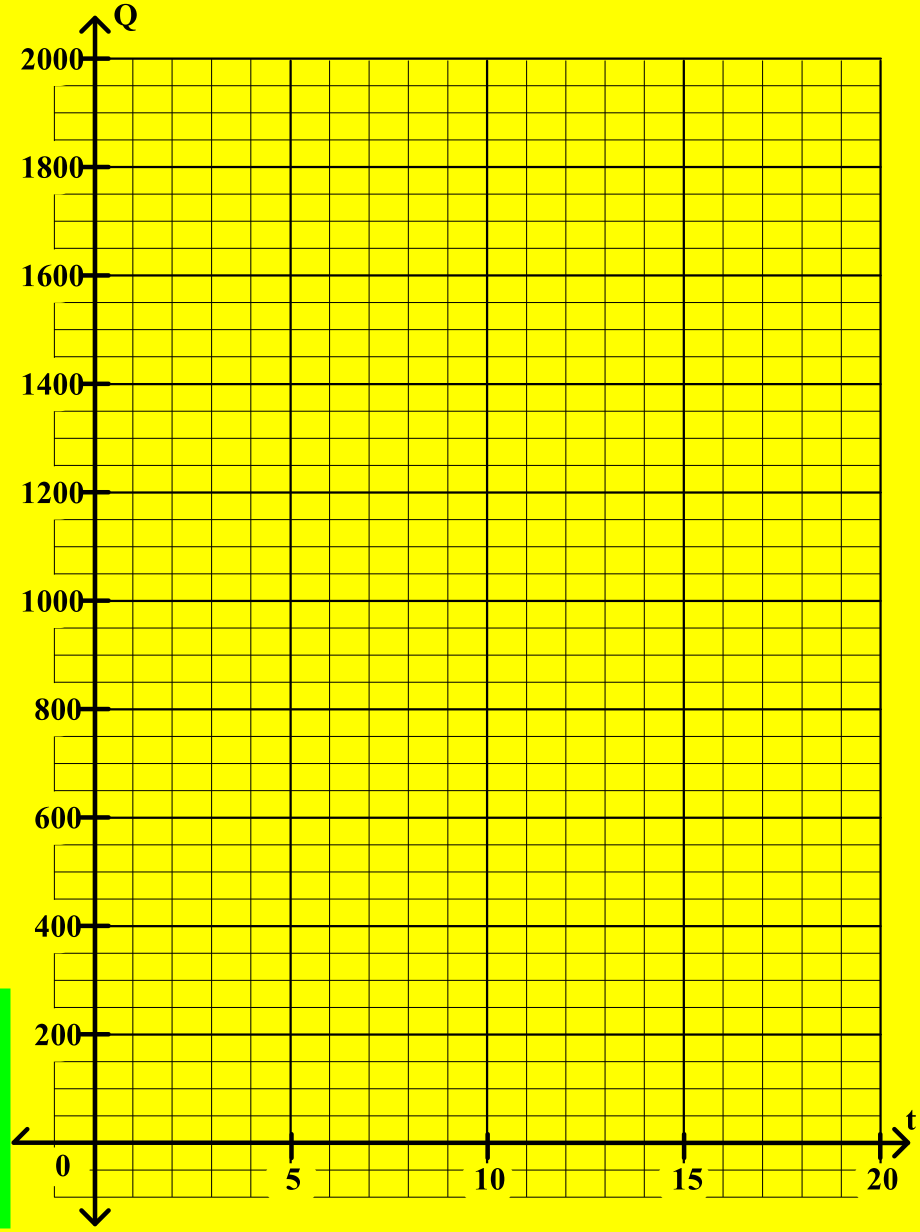

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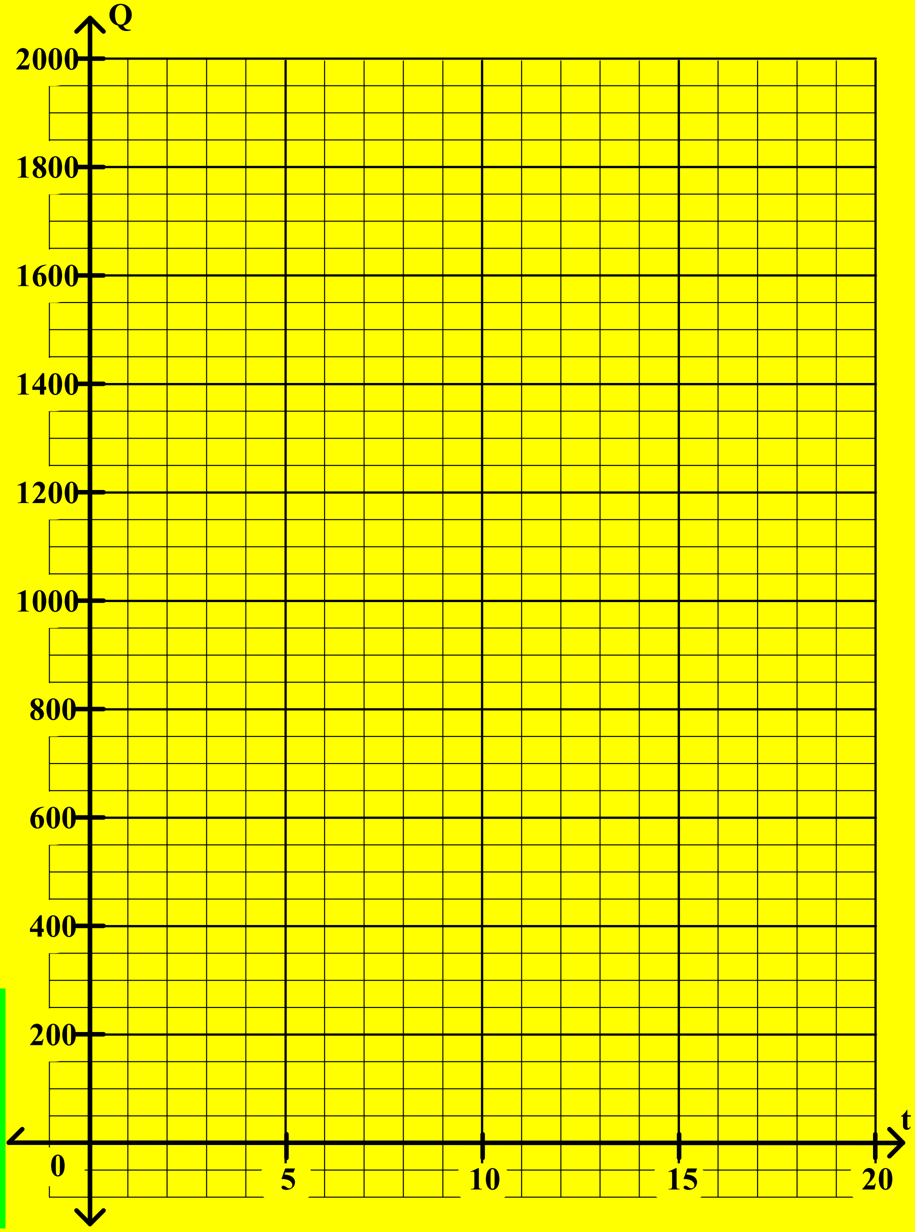

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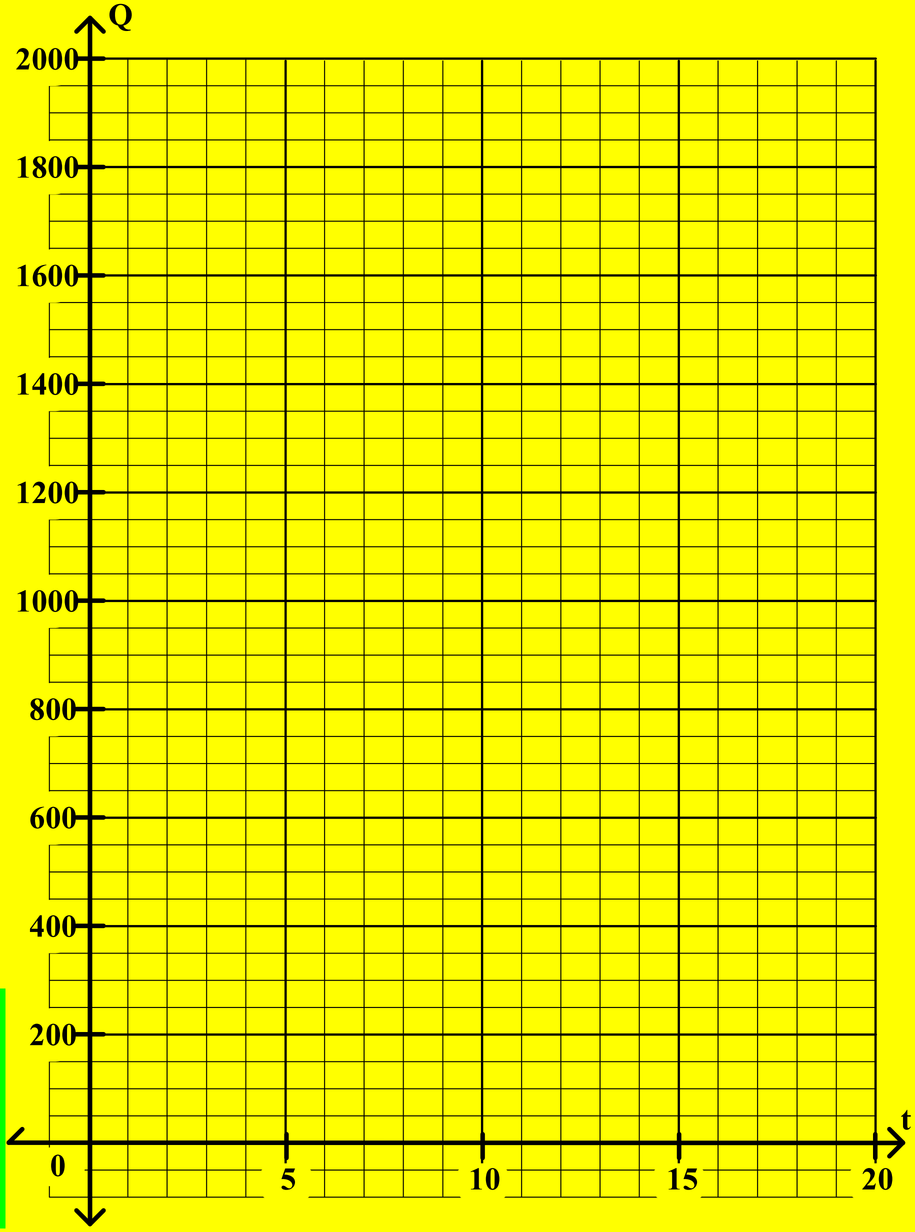

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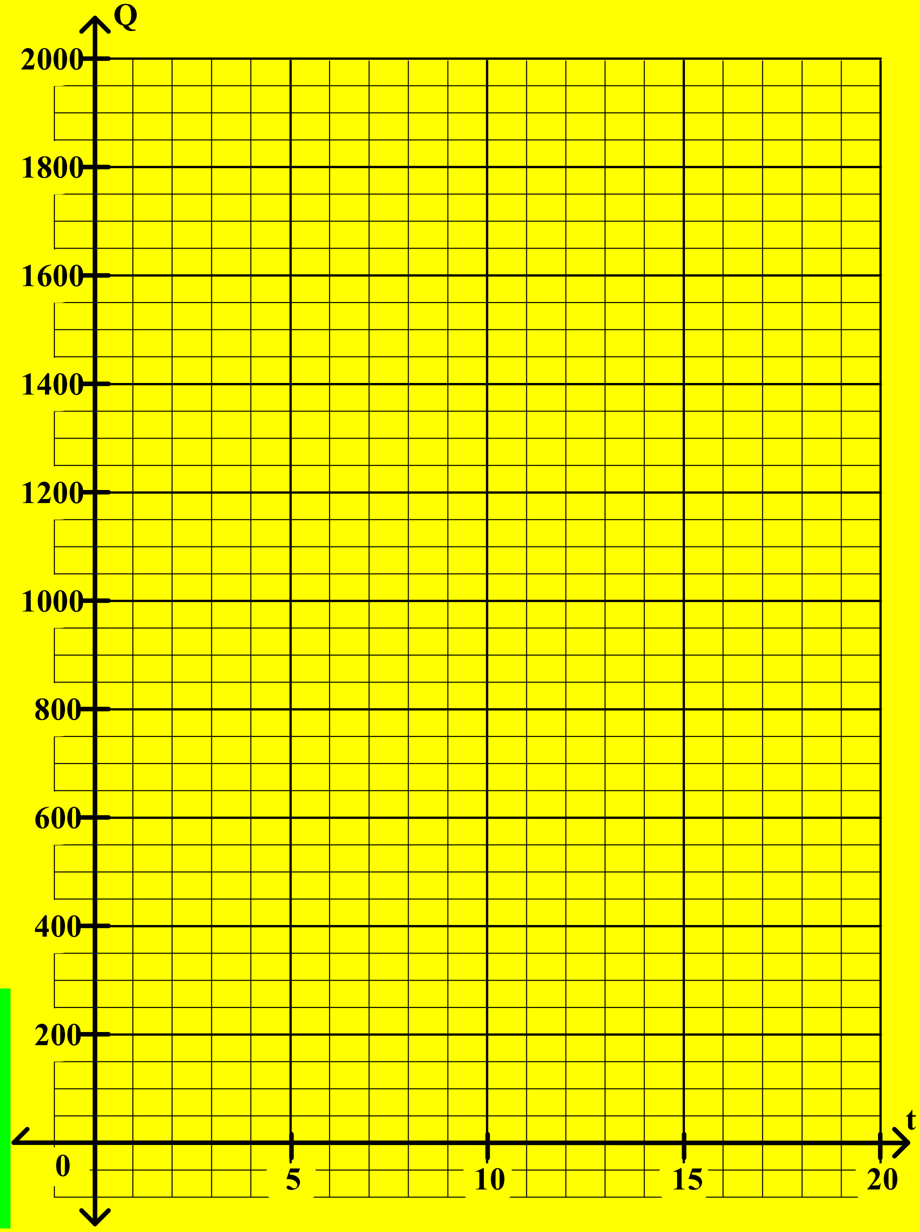

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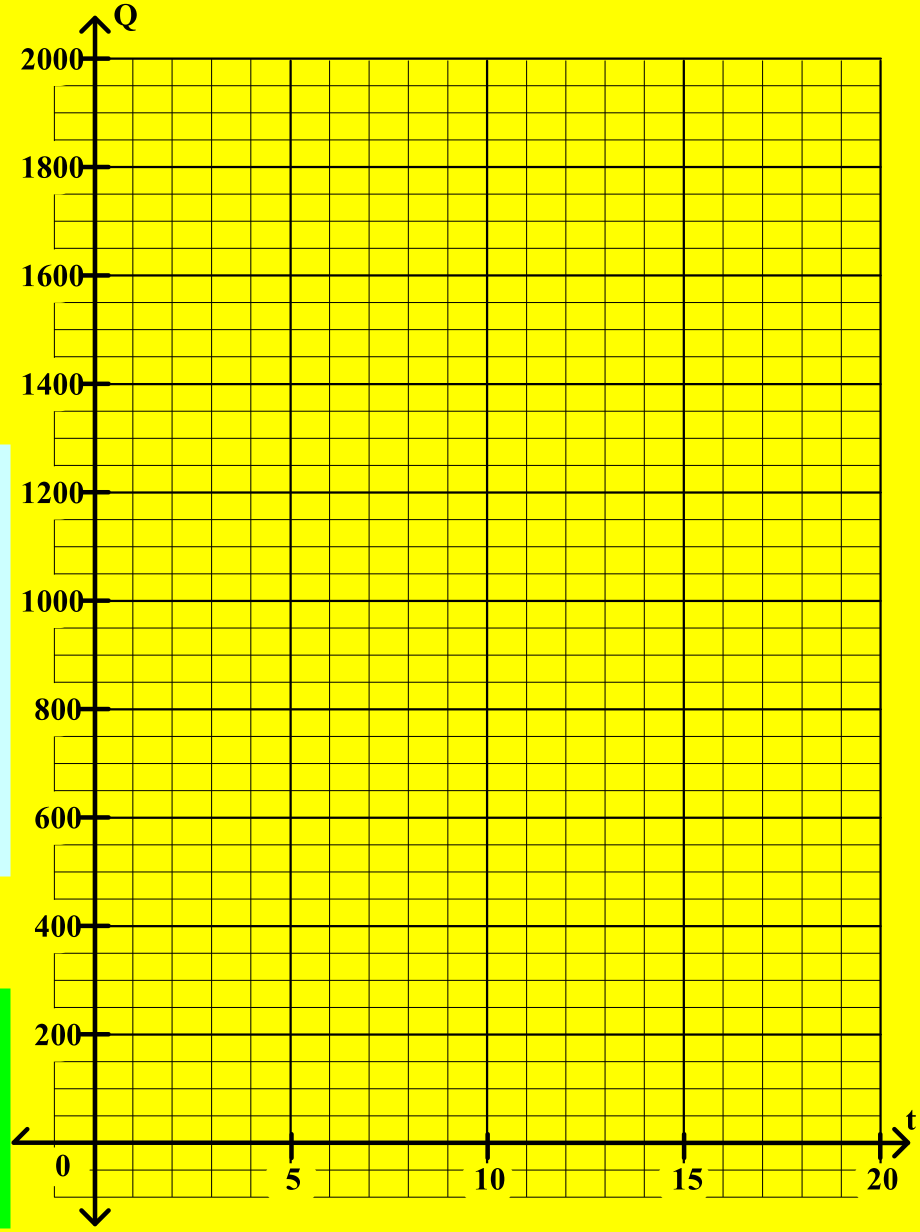

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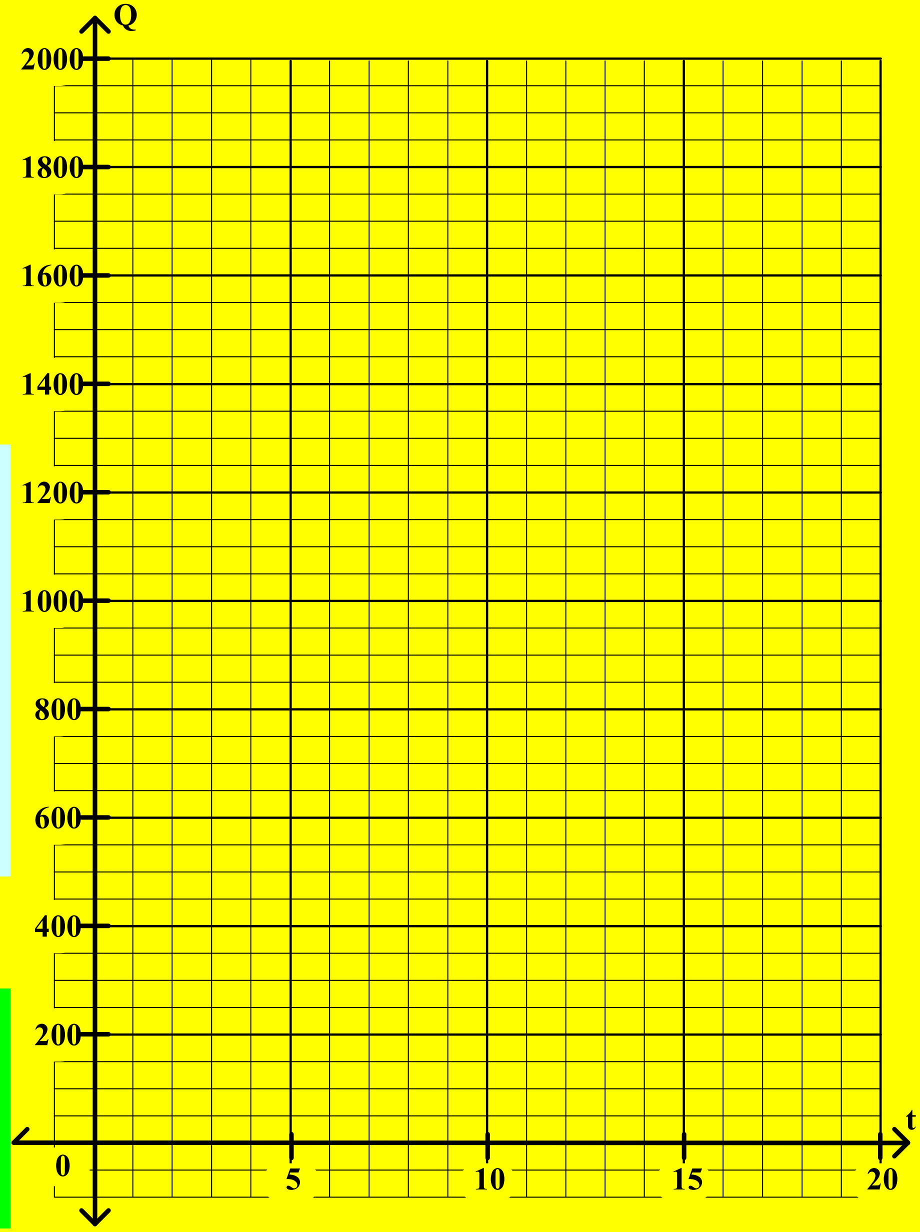

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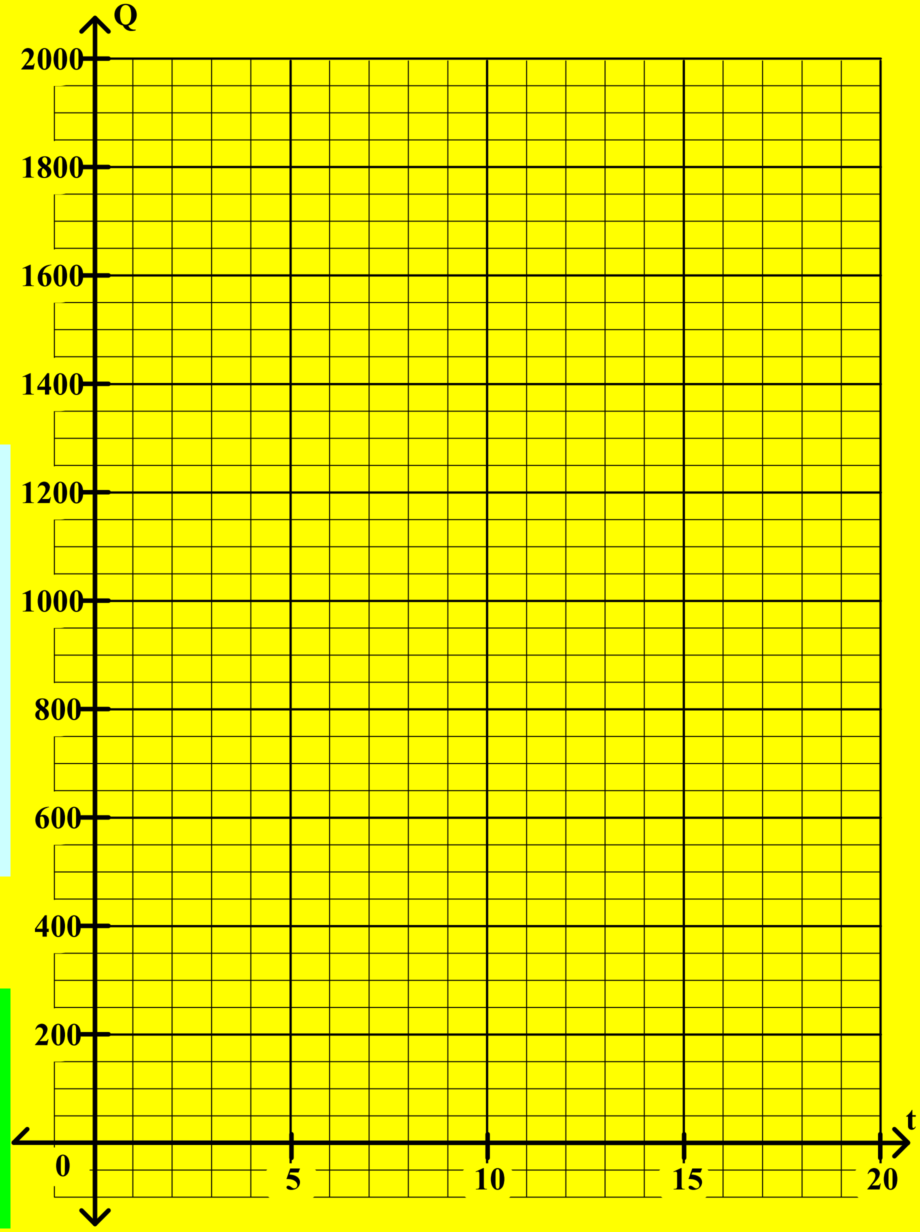

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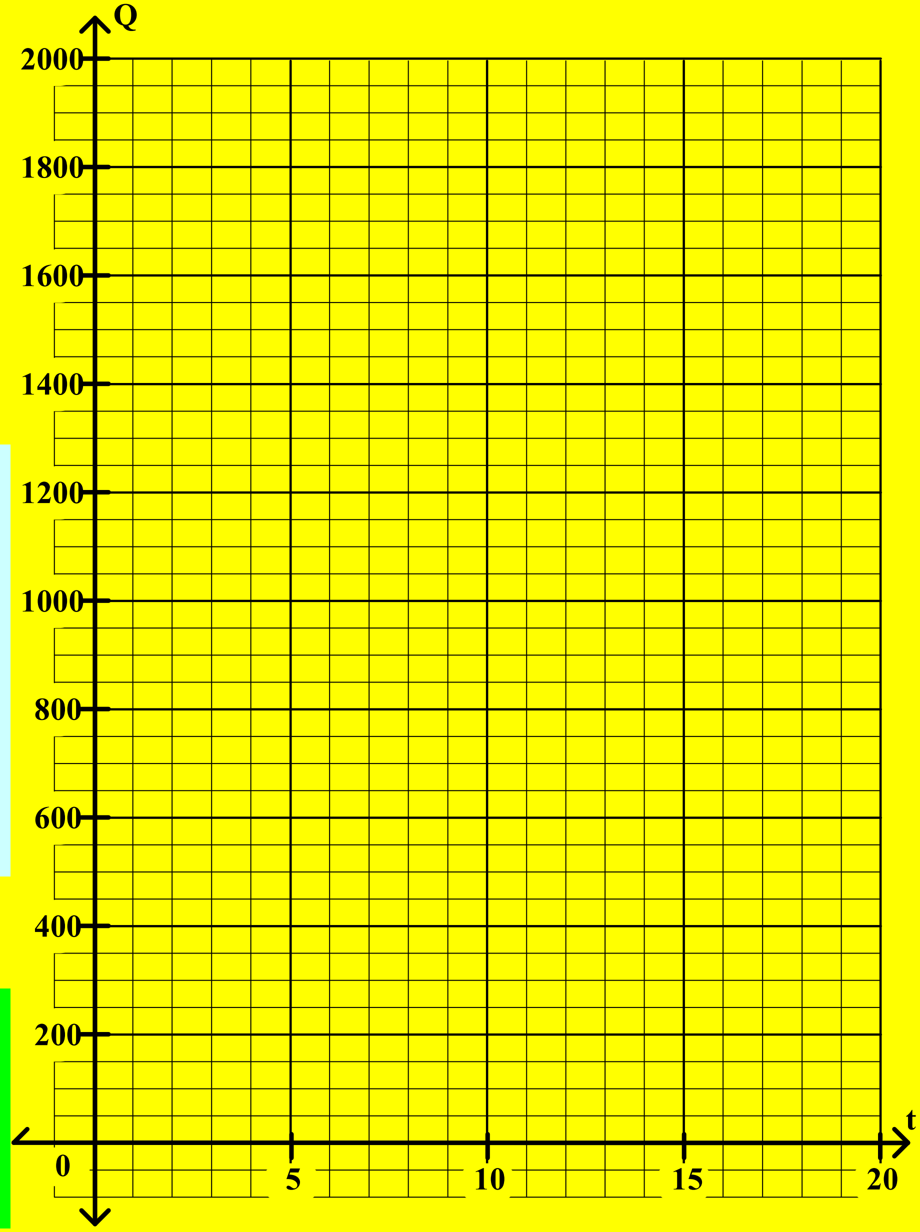

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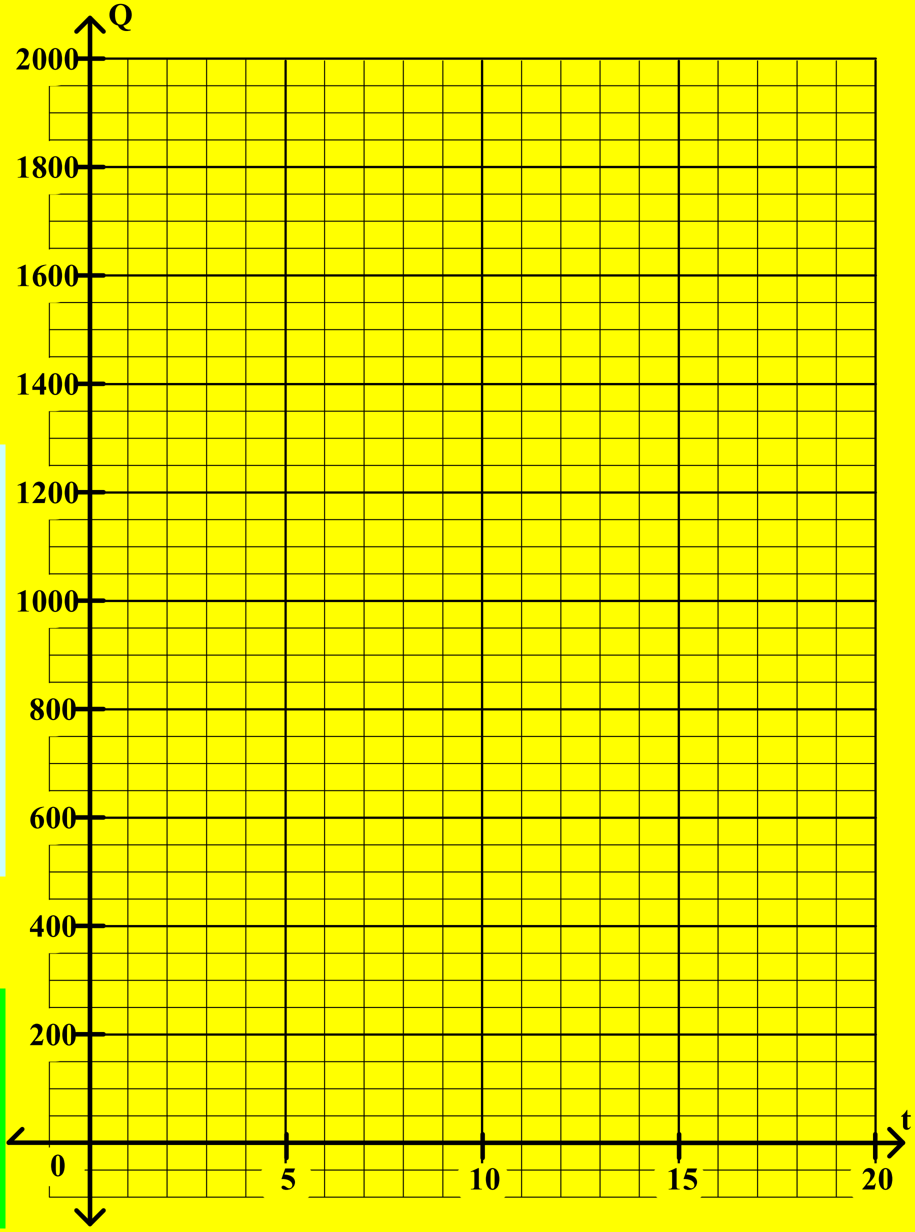

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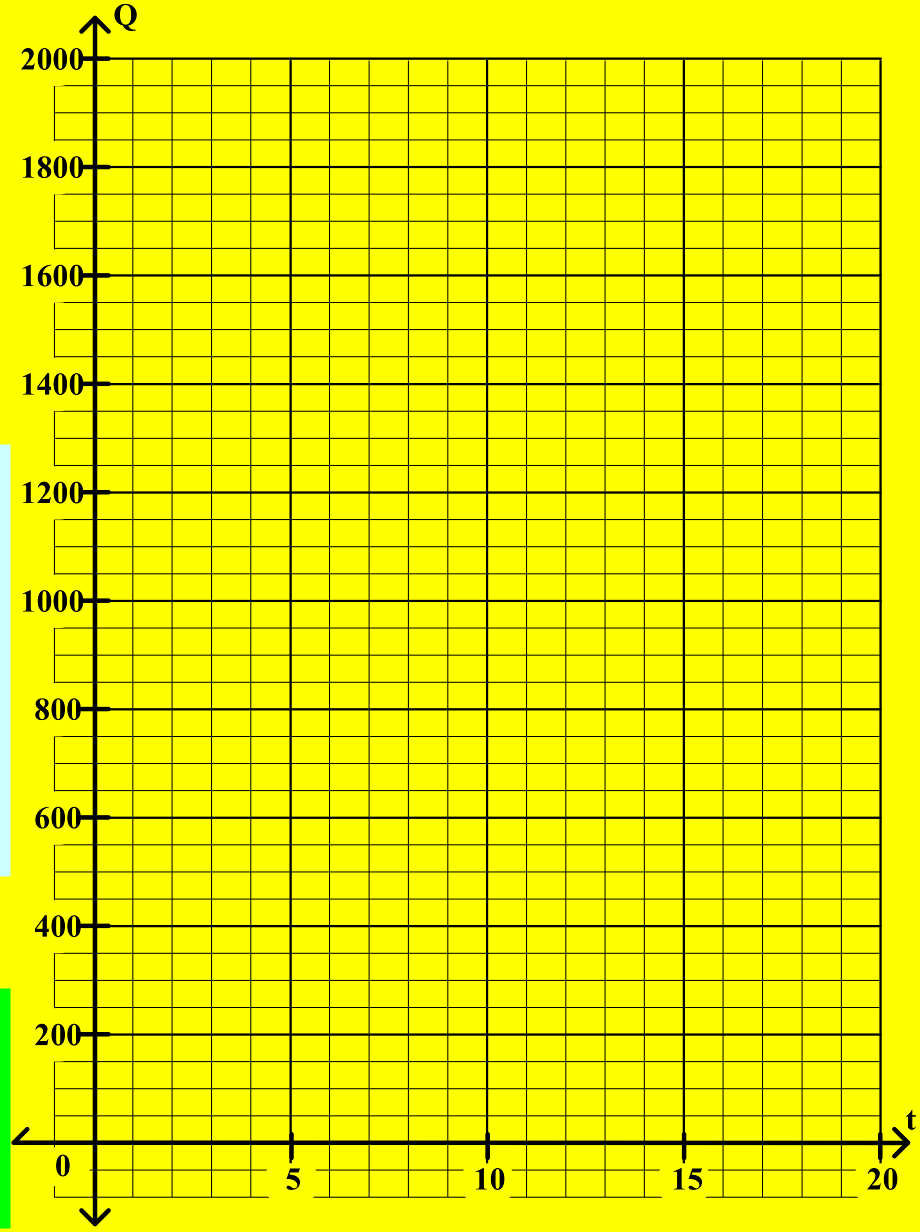

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t	Q
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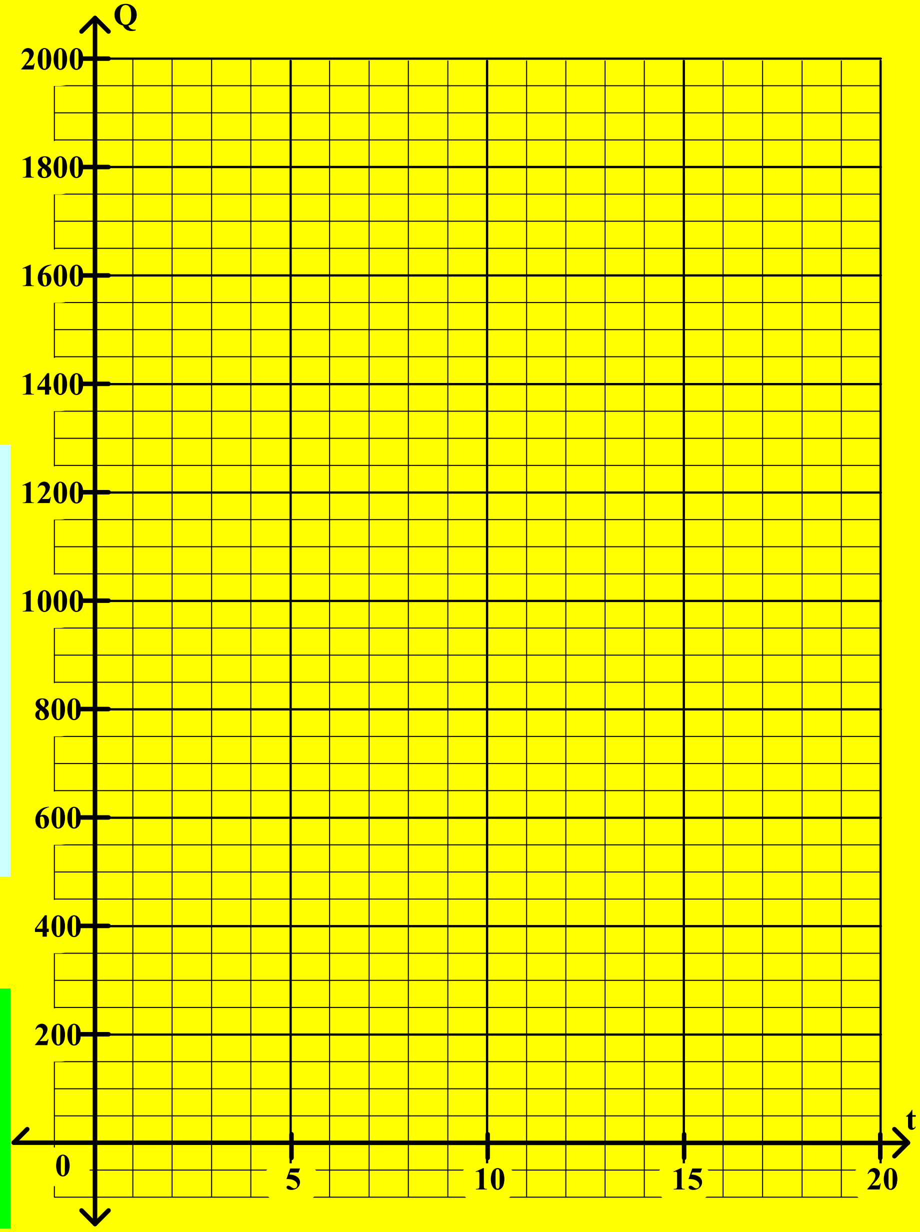

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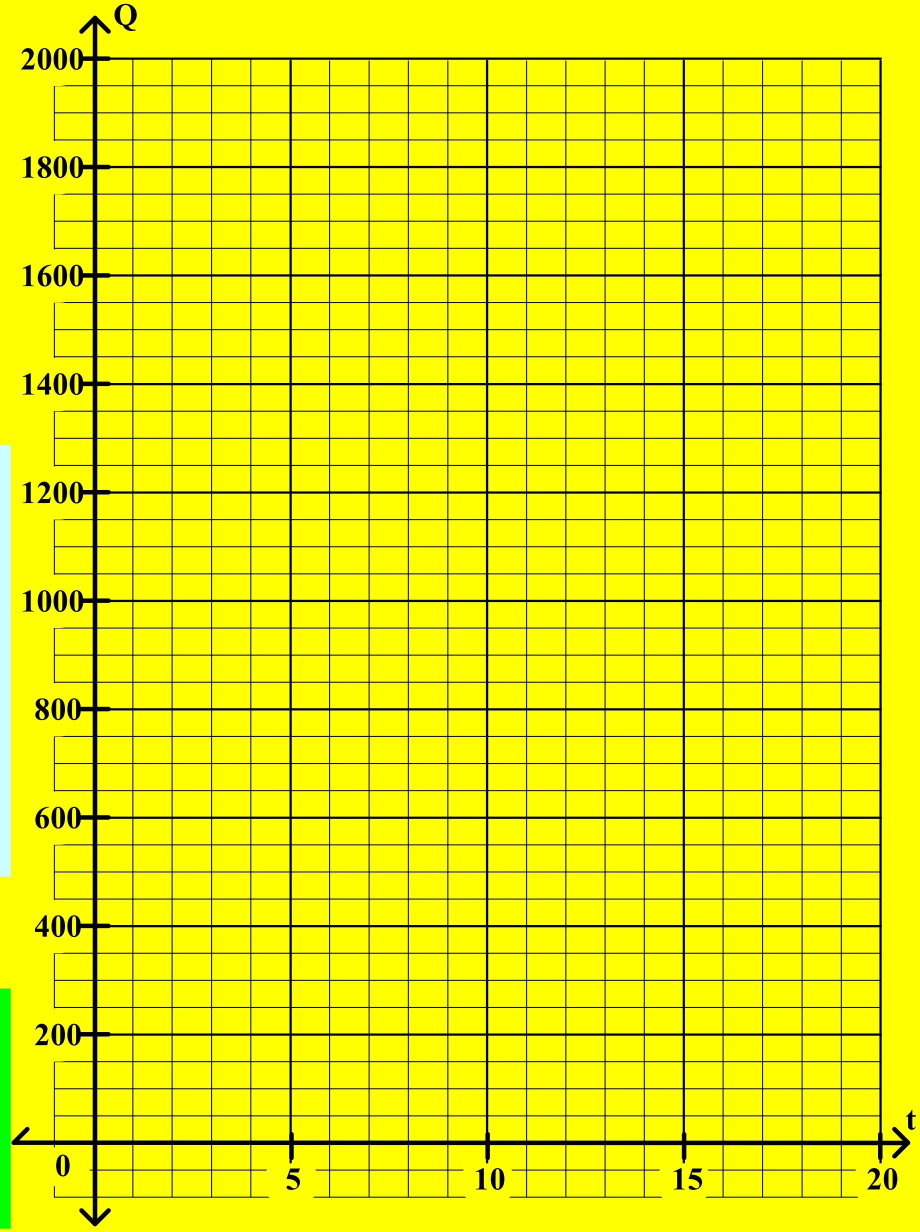

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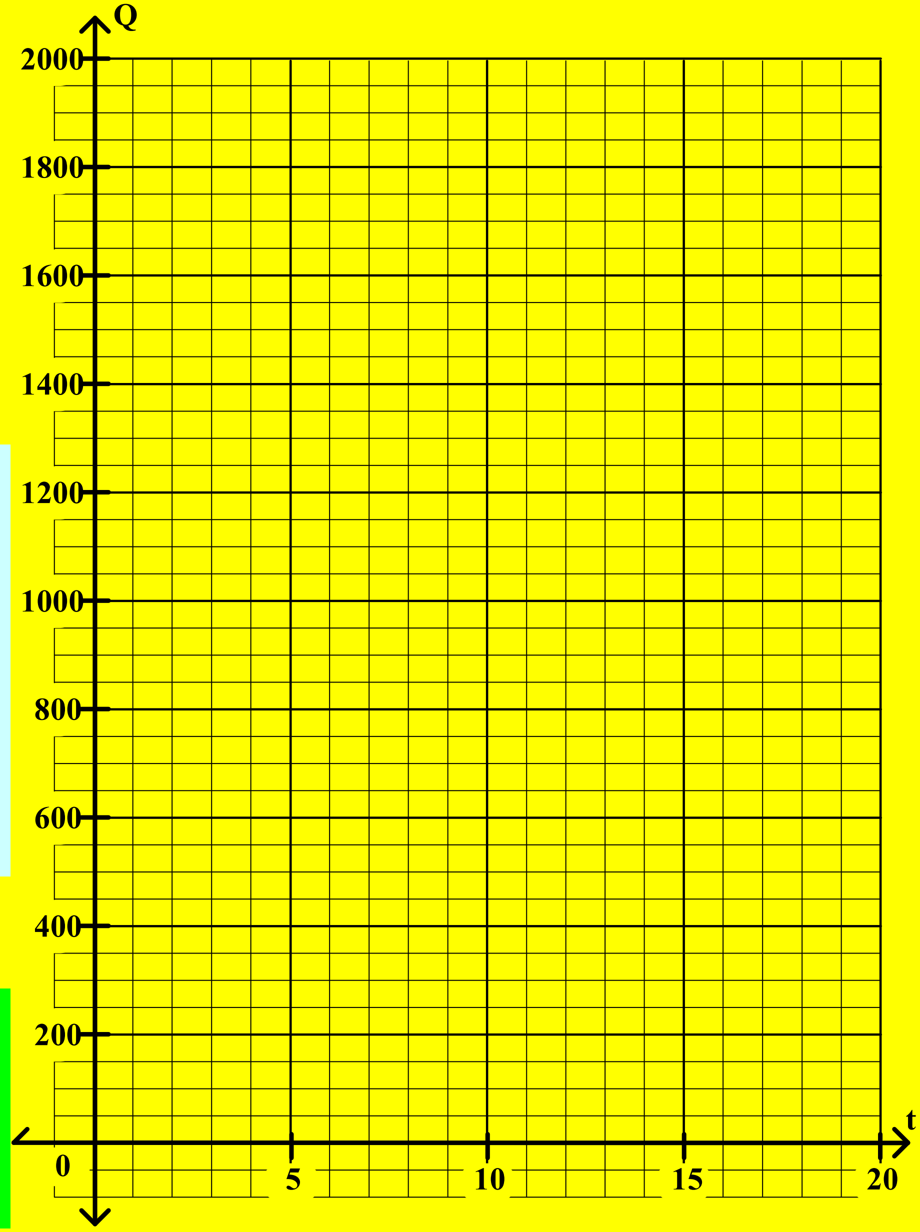

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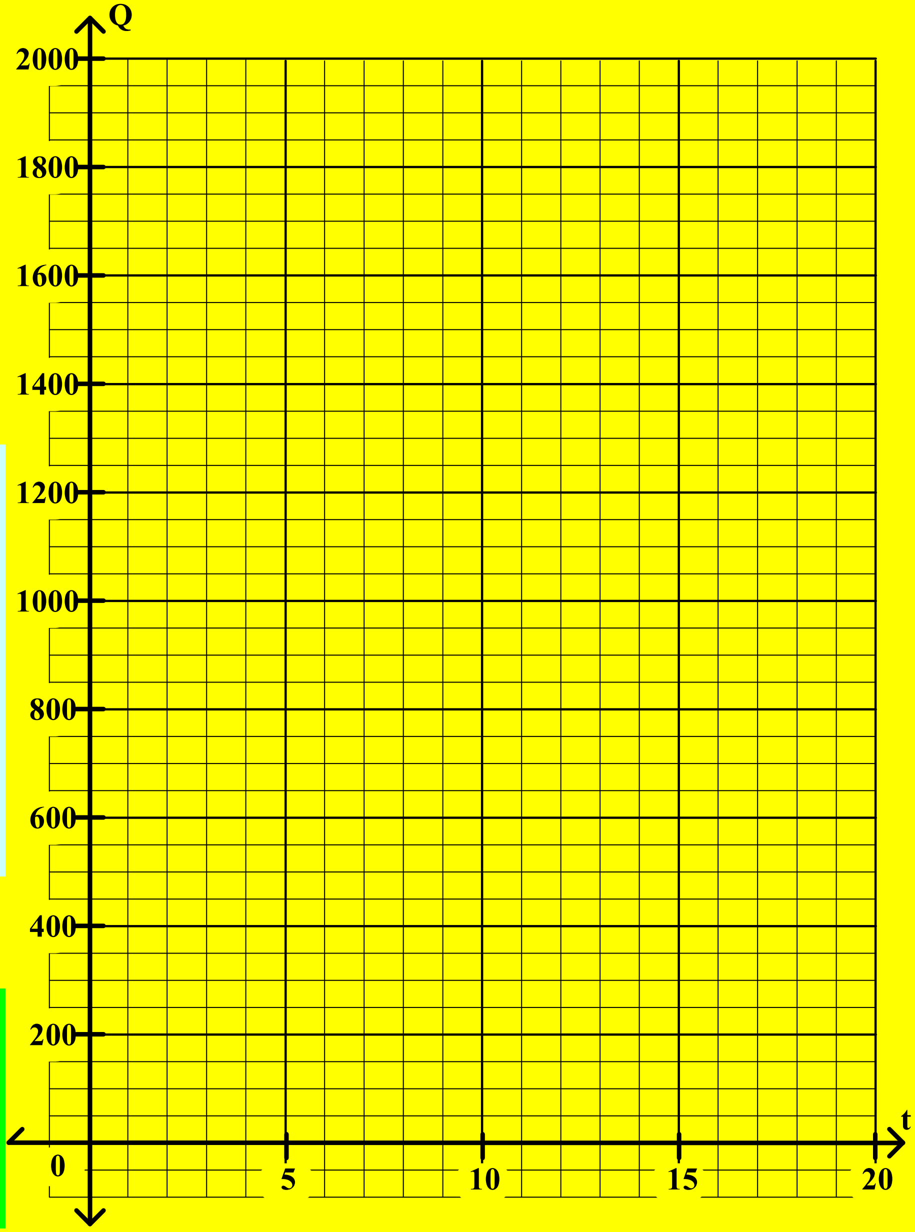

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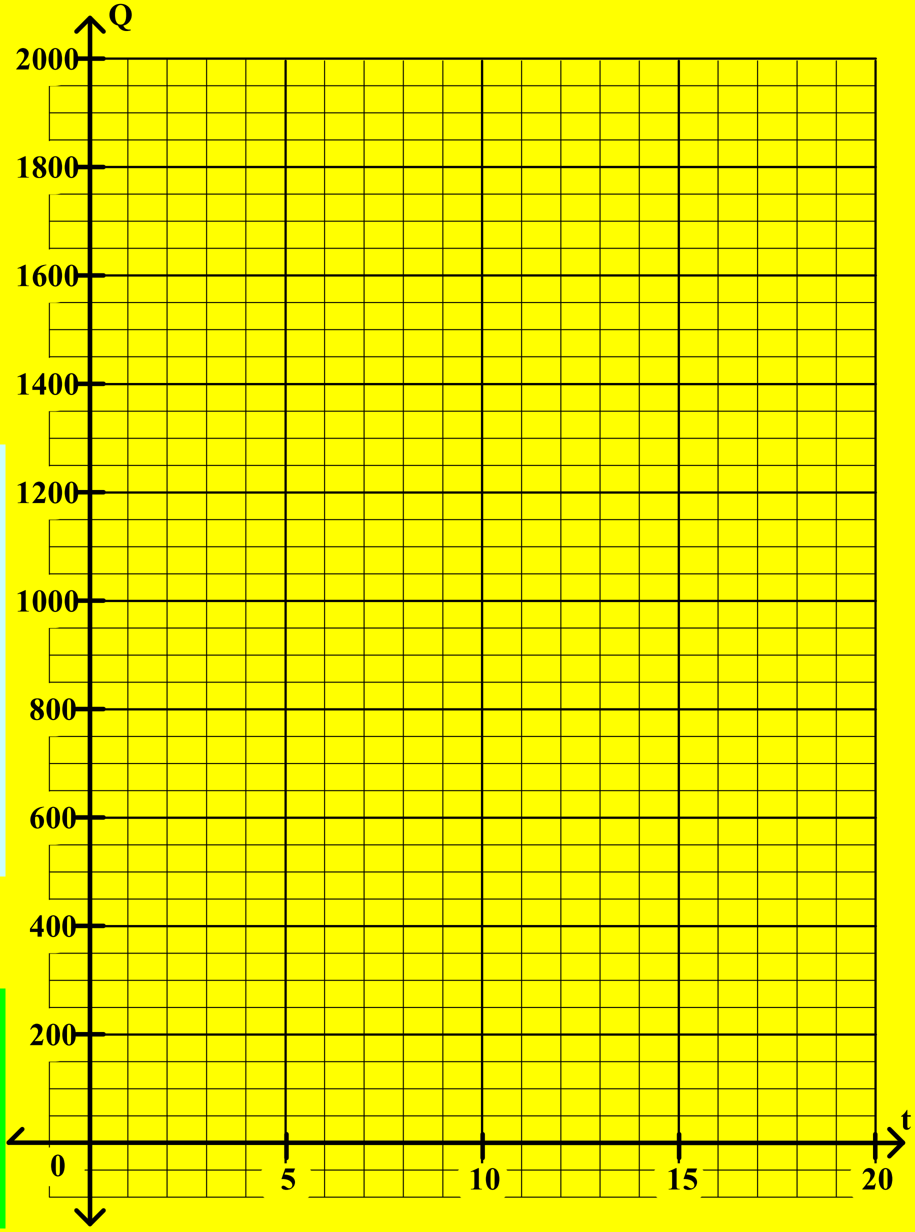

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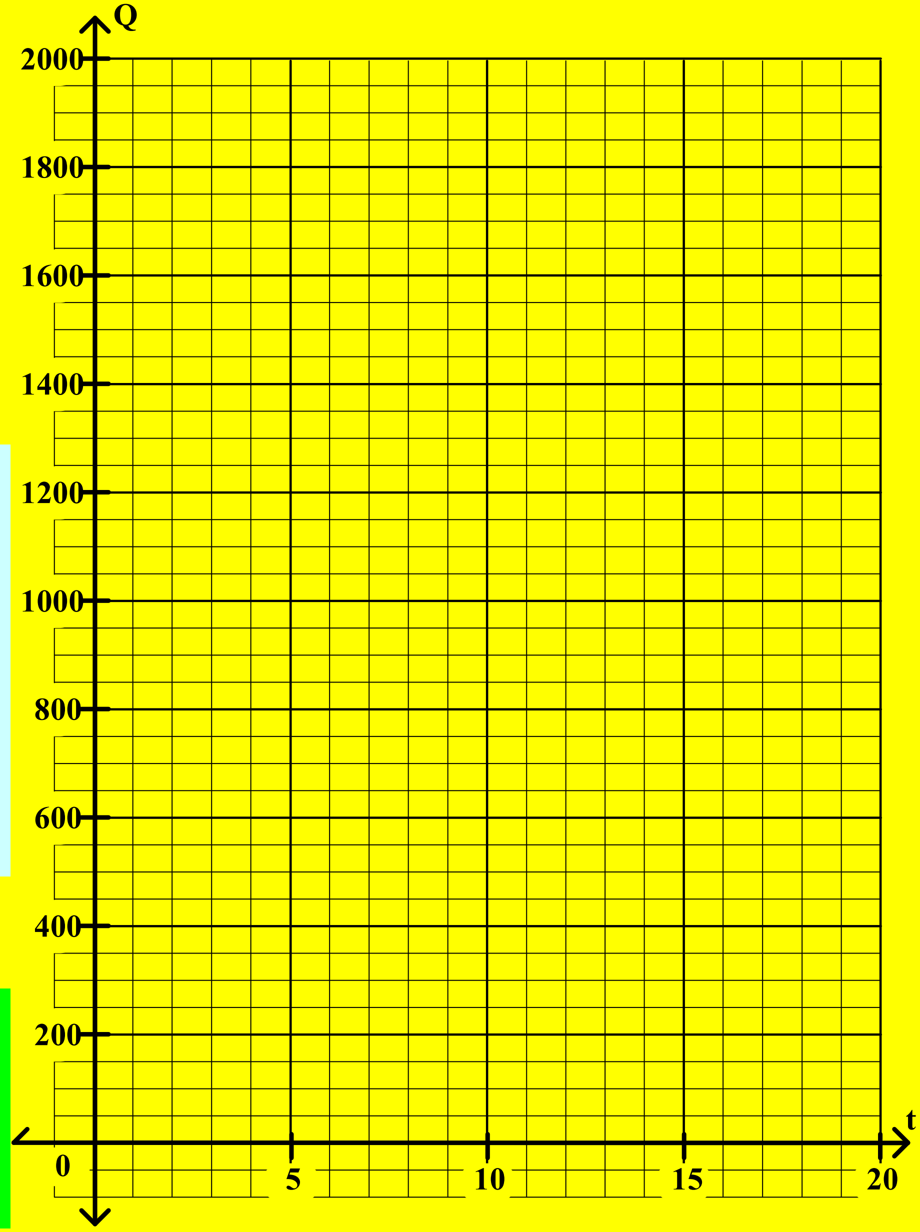

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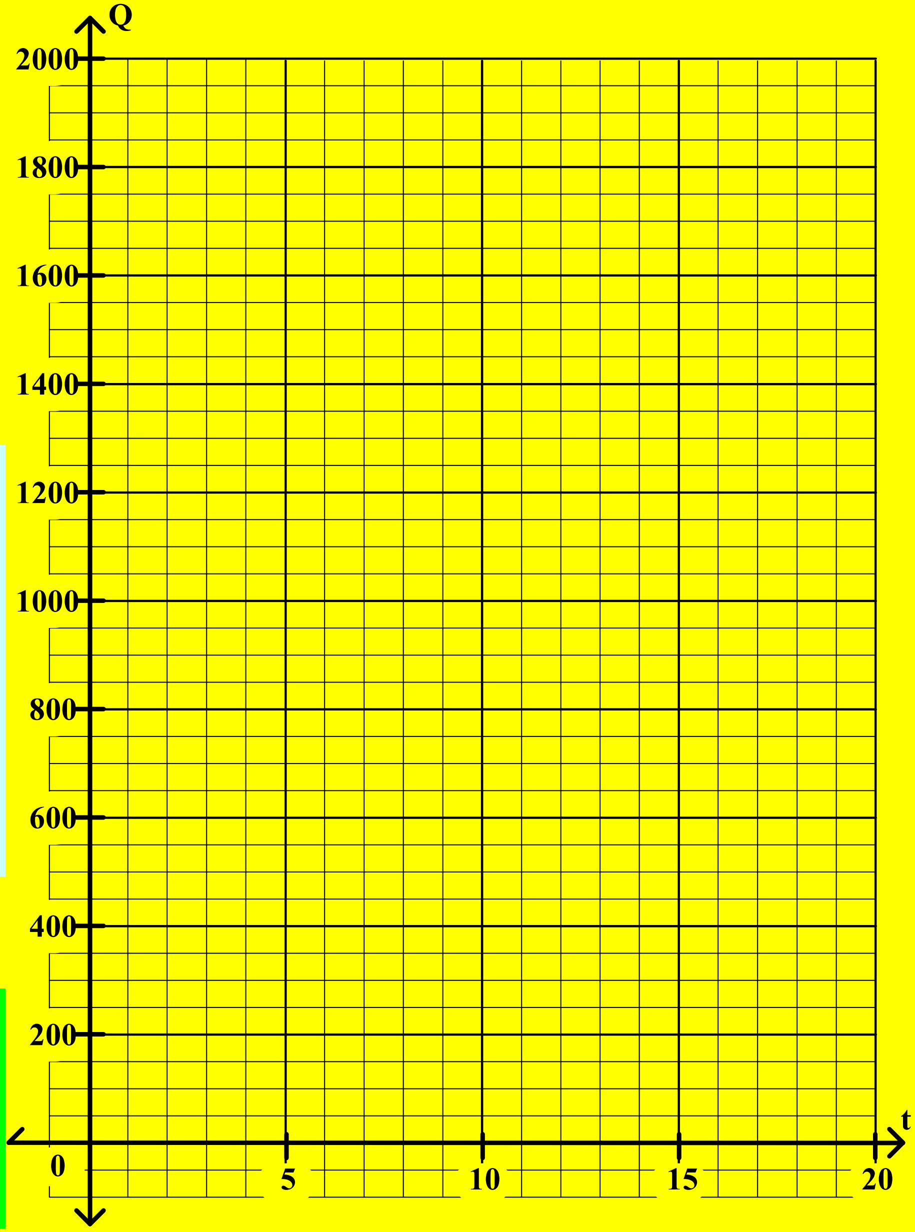

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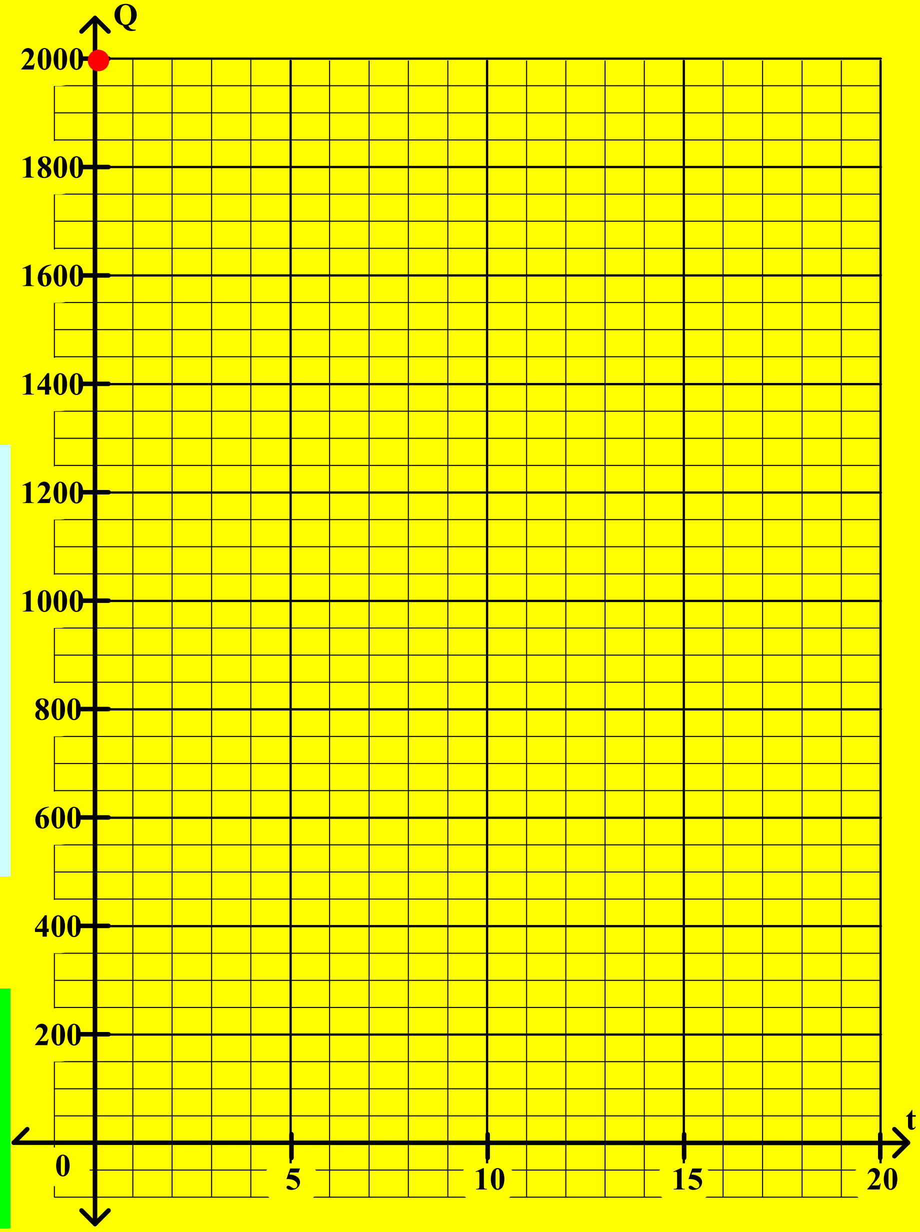

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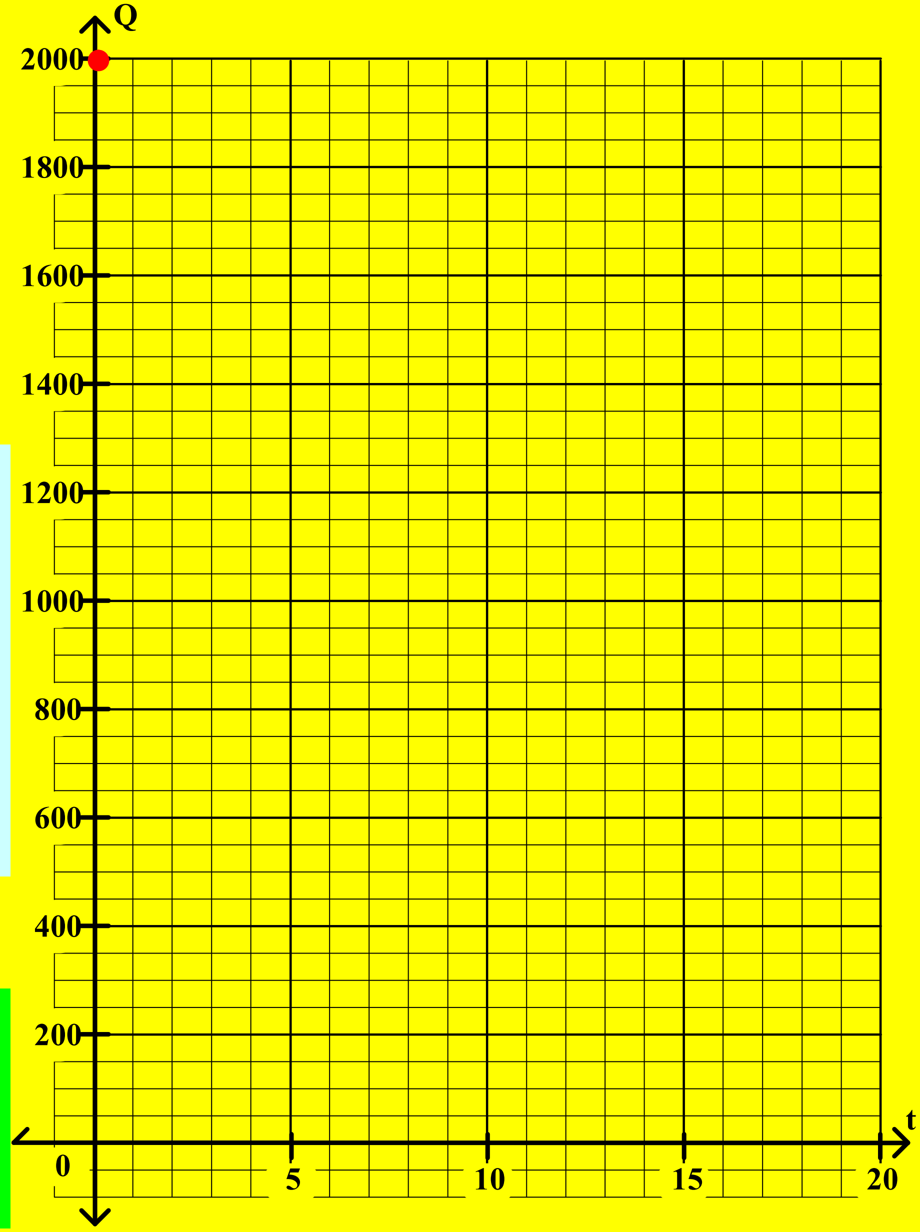

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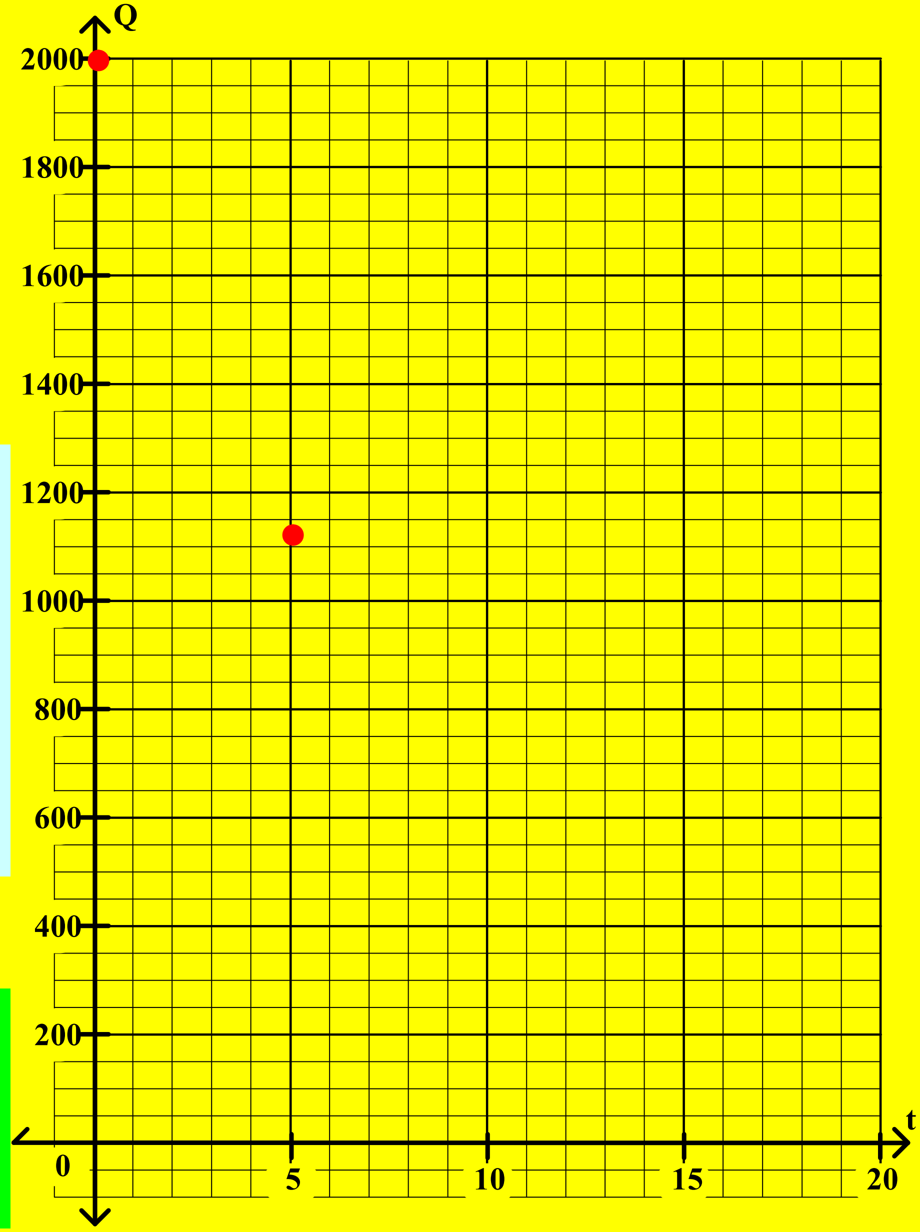

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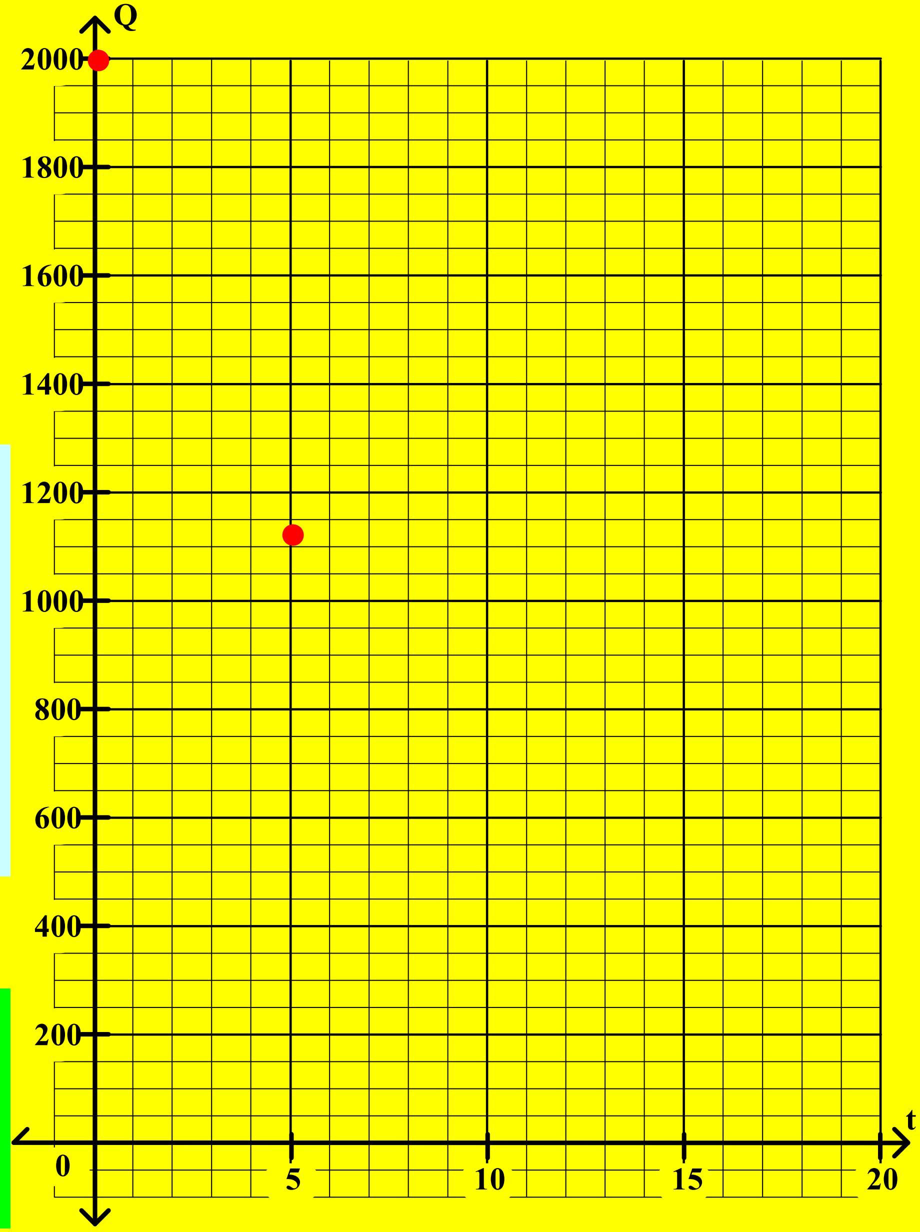

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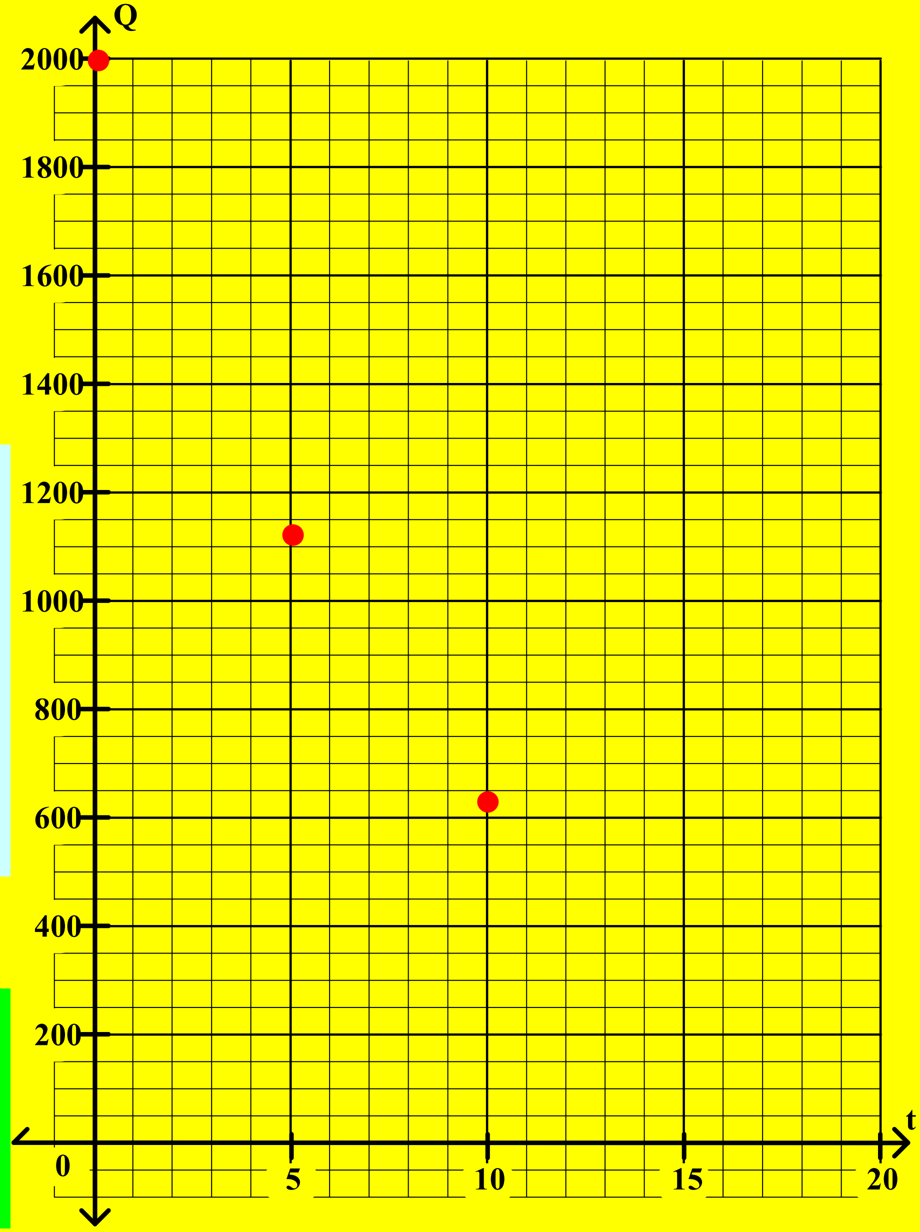

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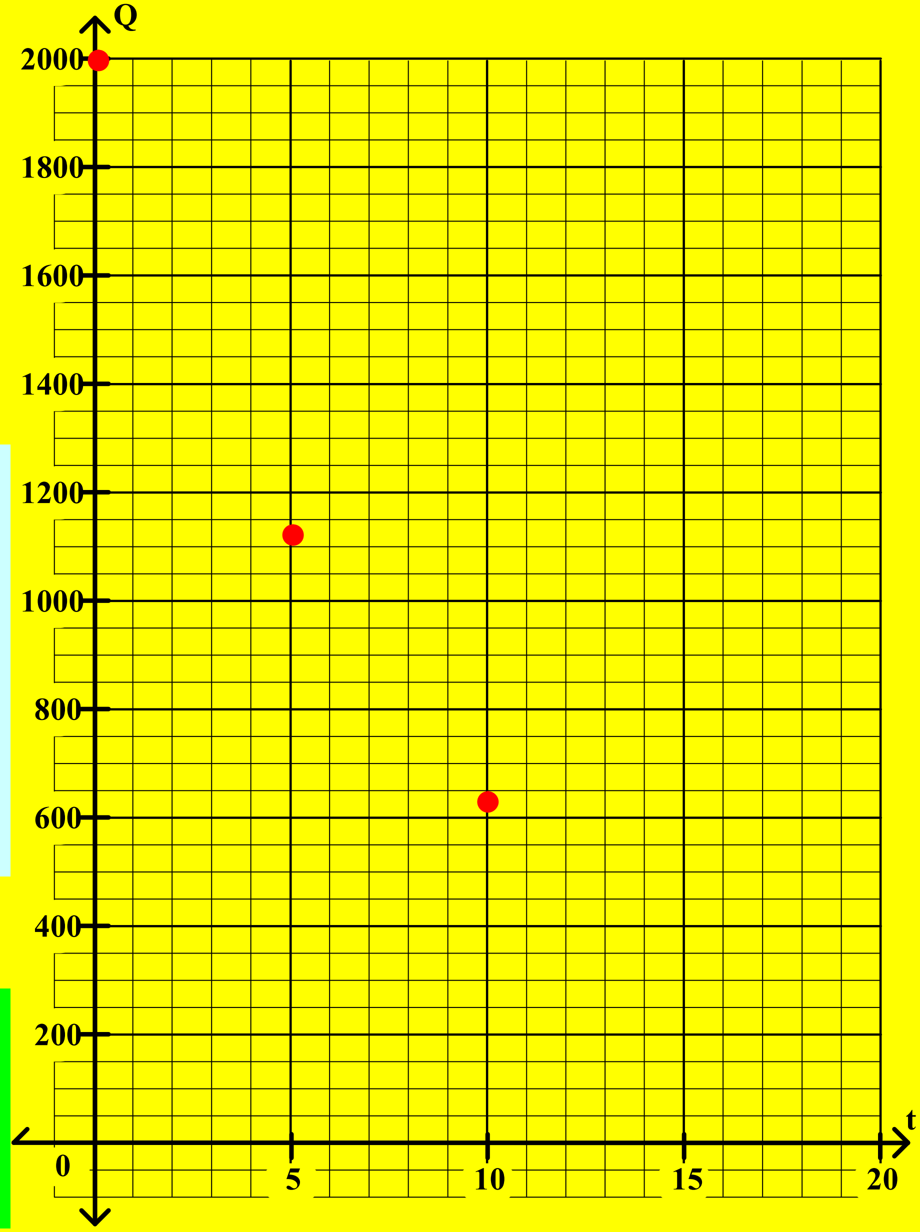

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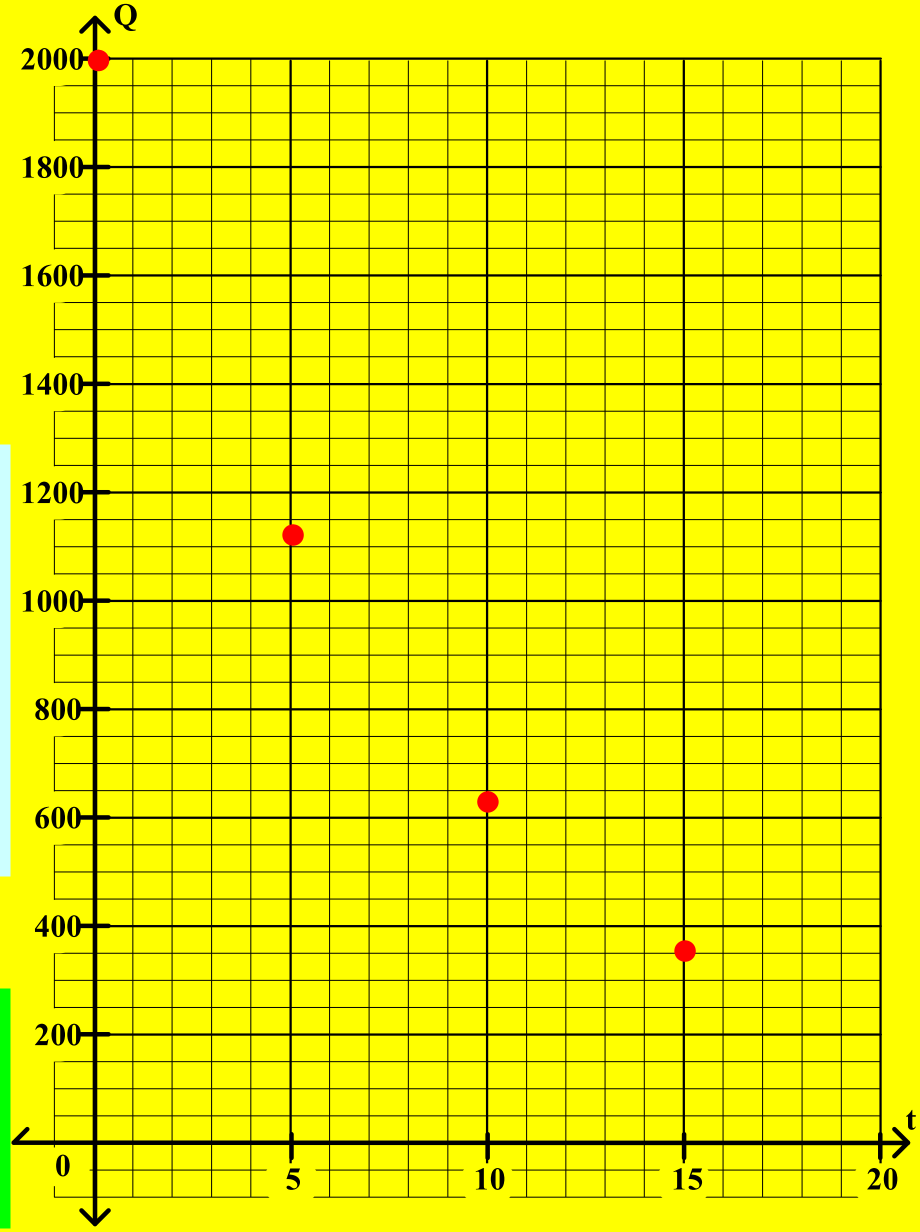

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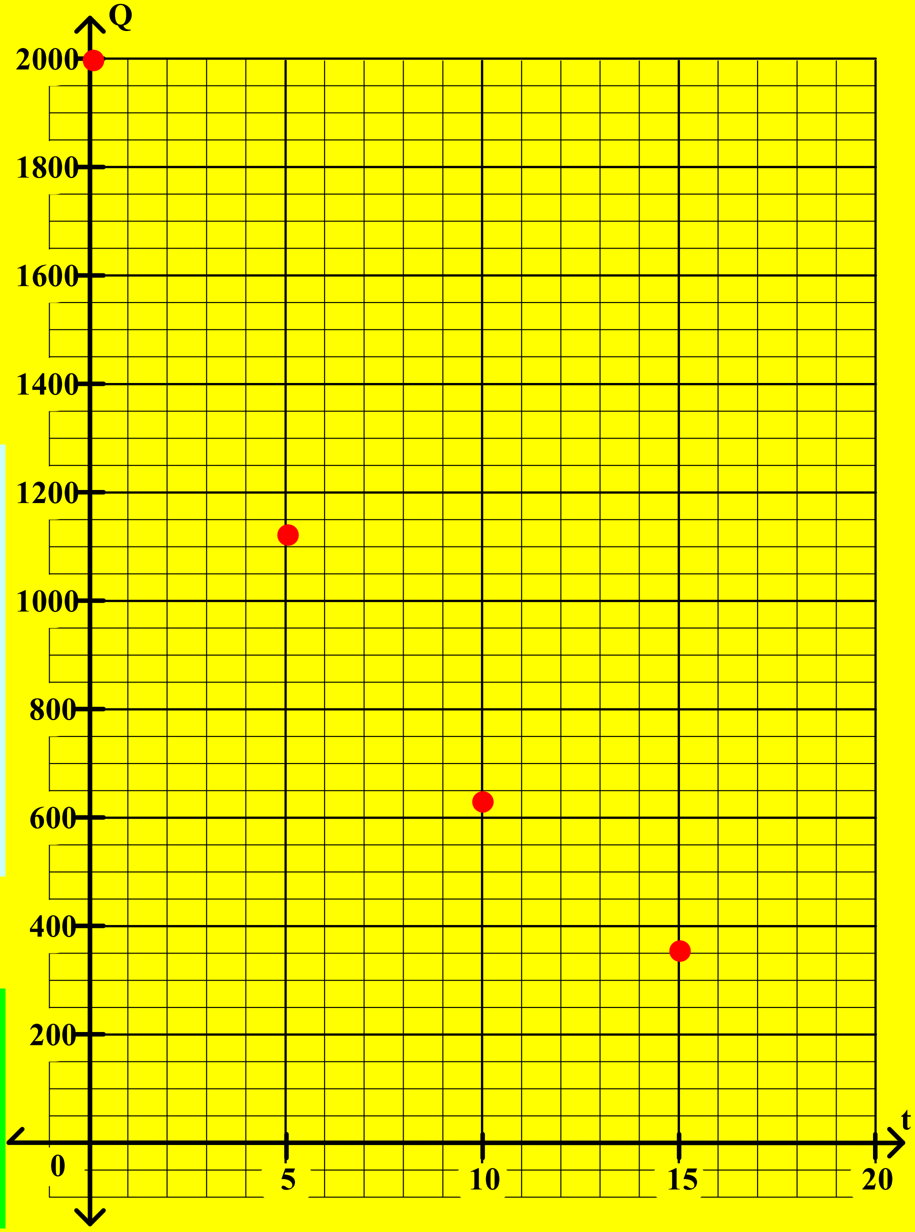

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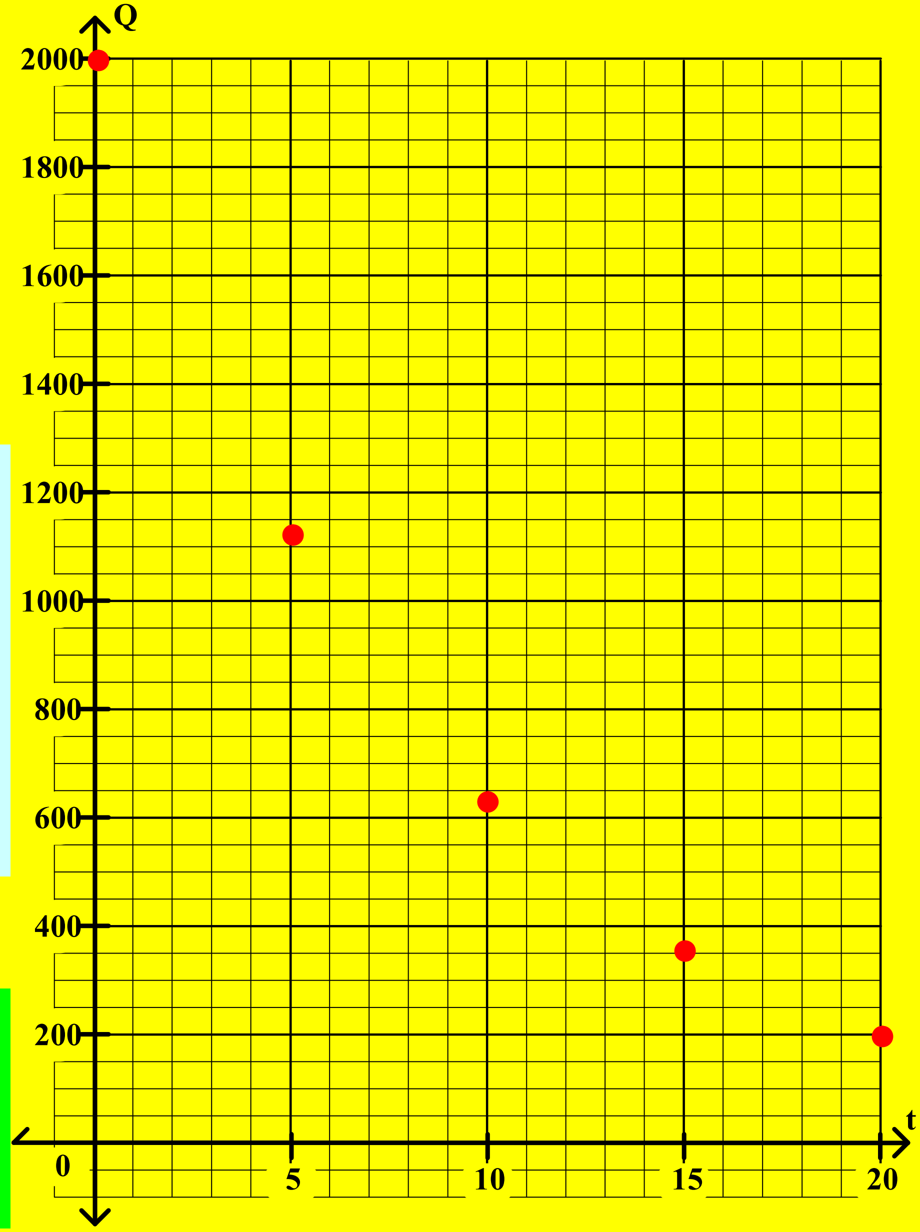

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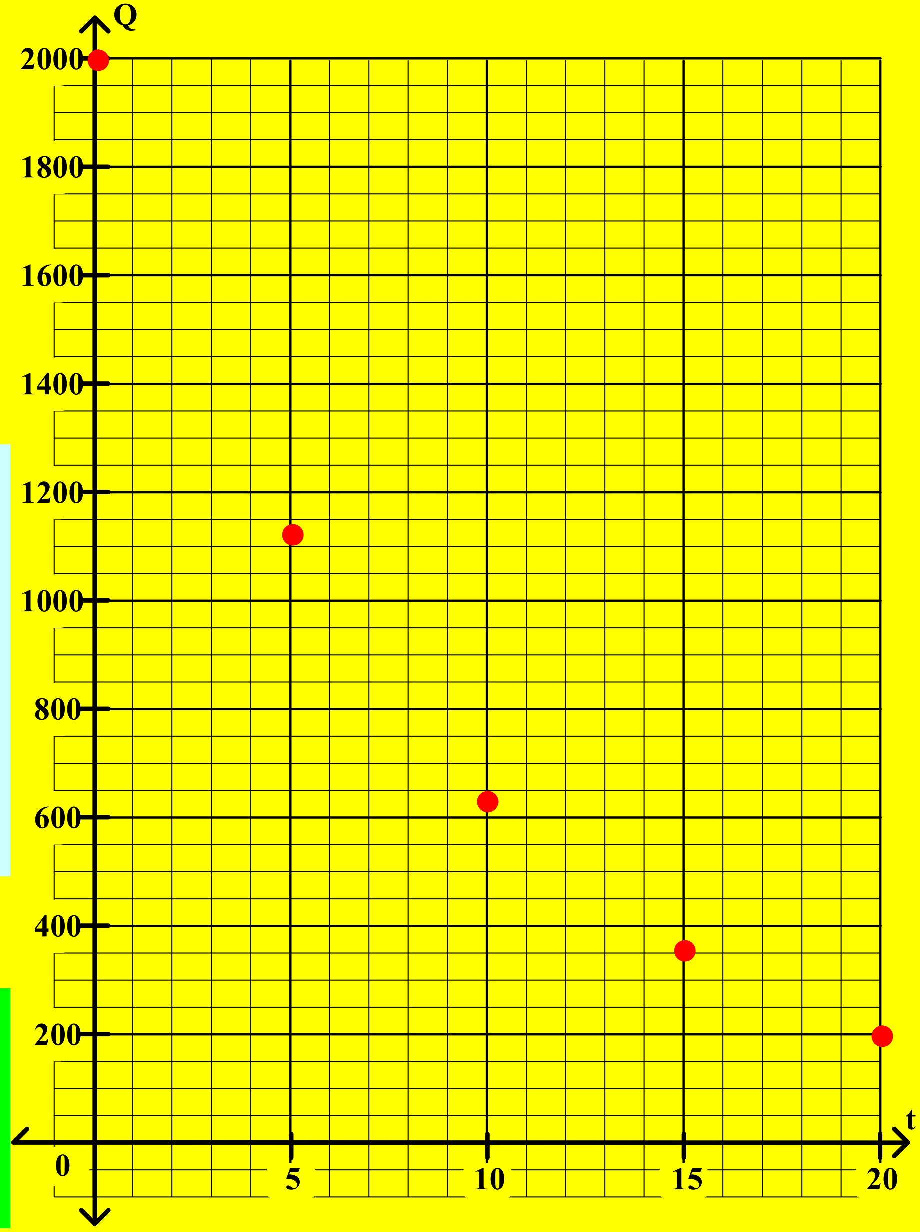

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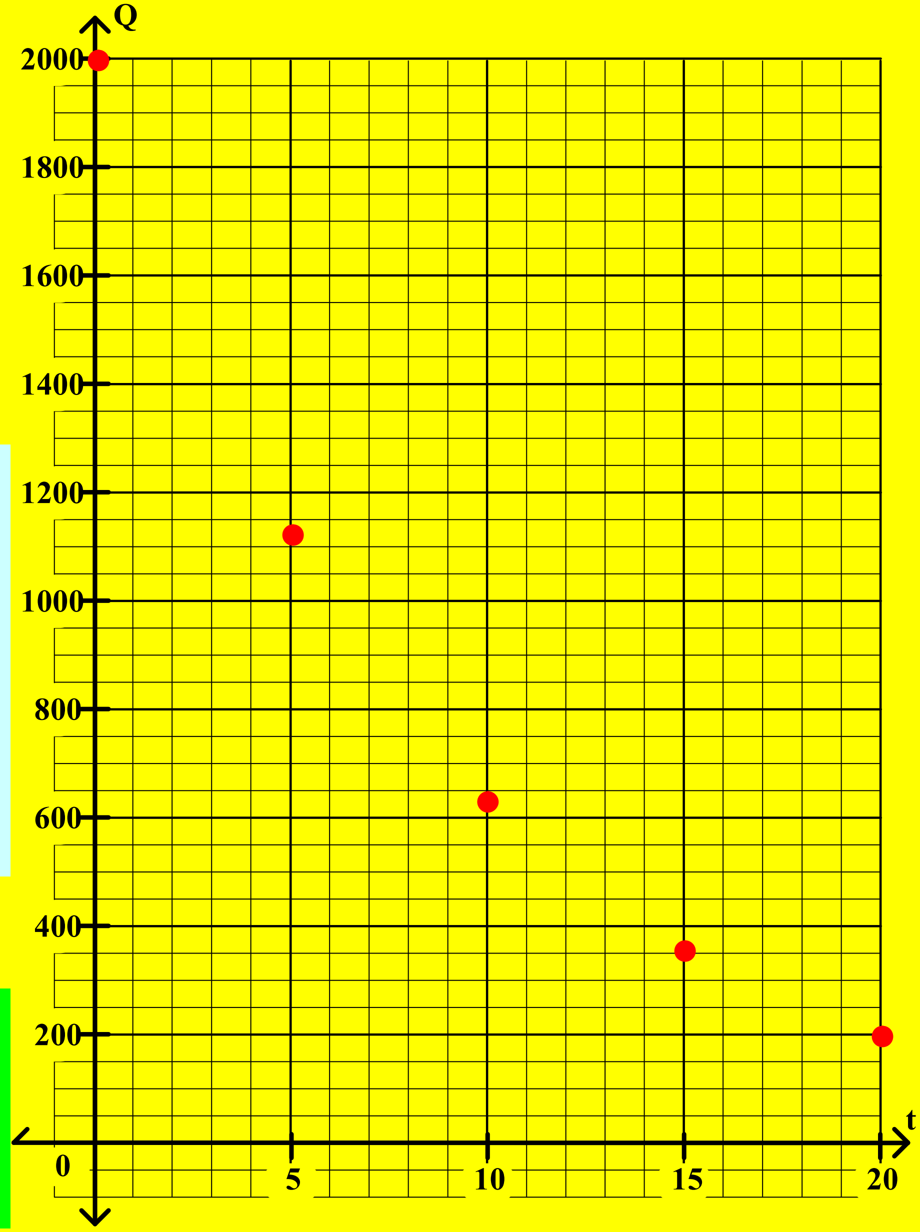

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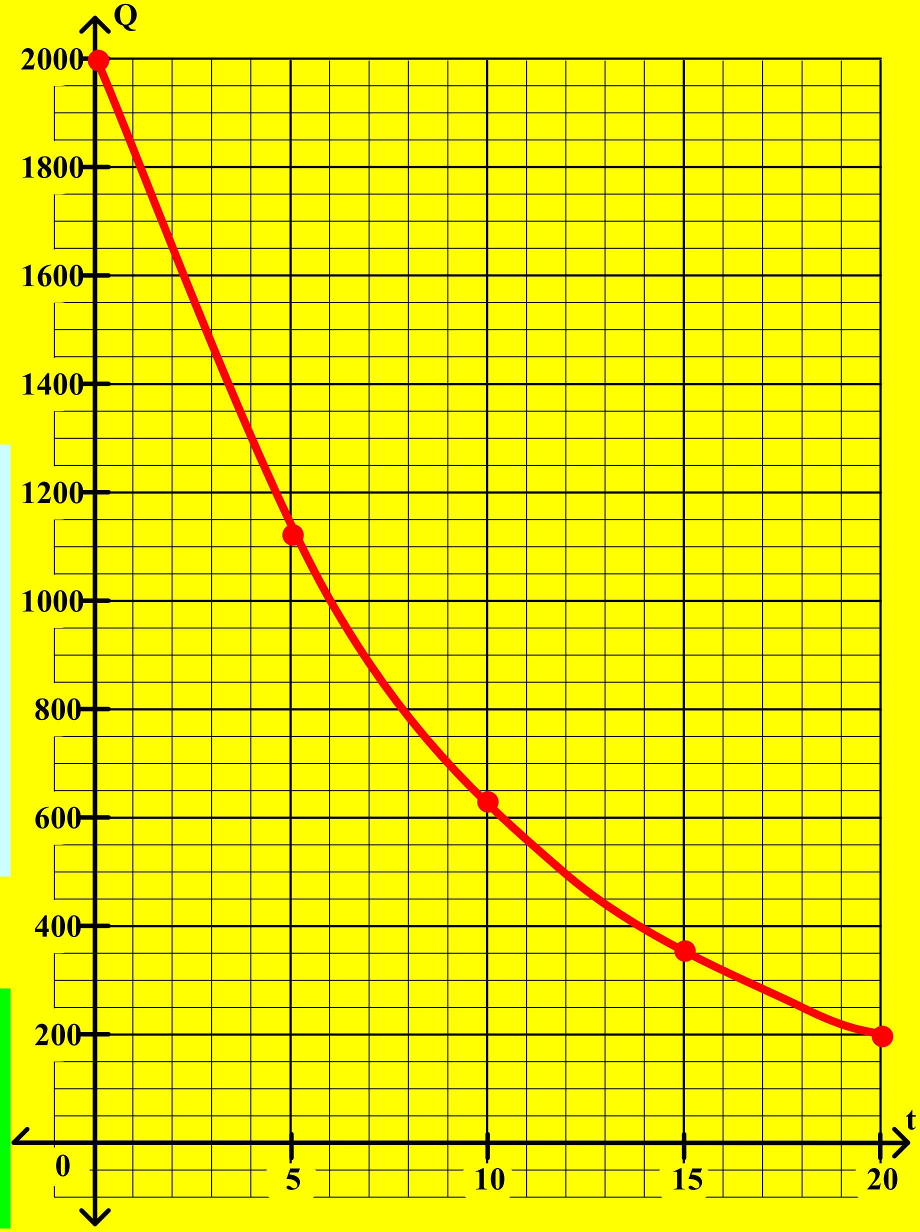

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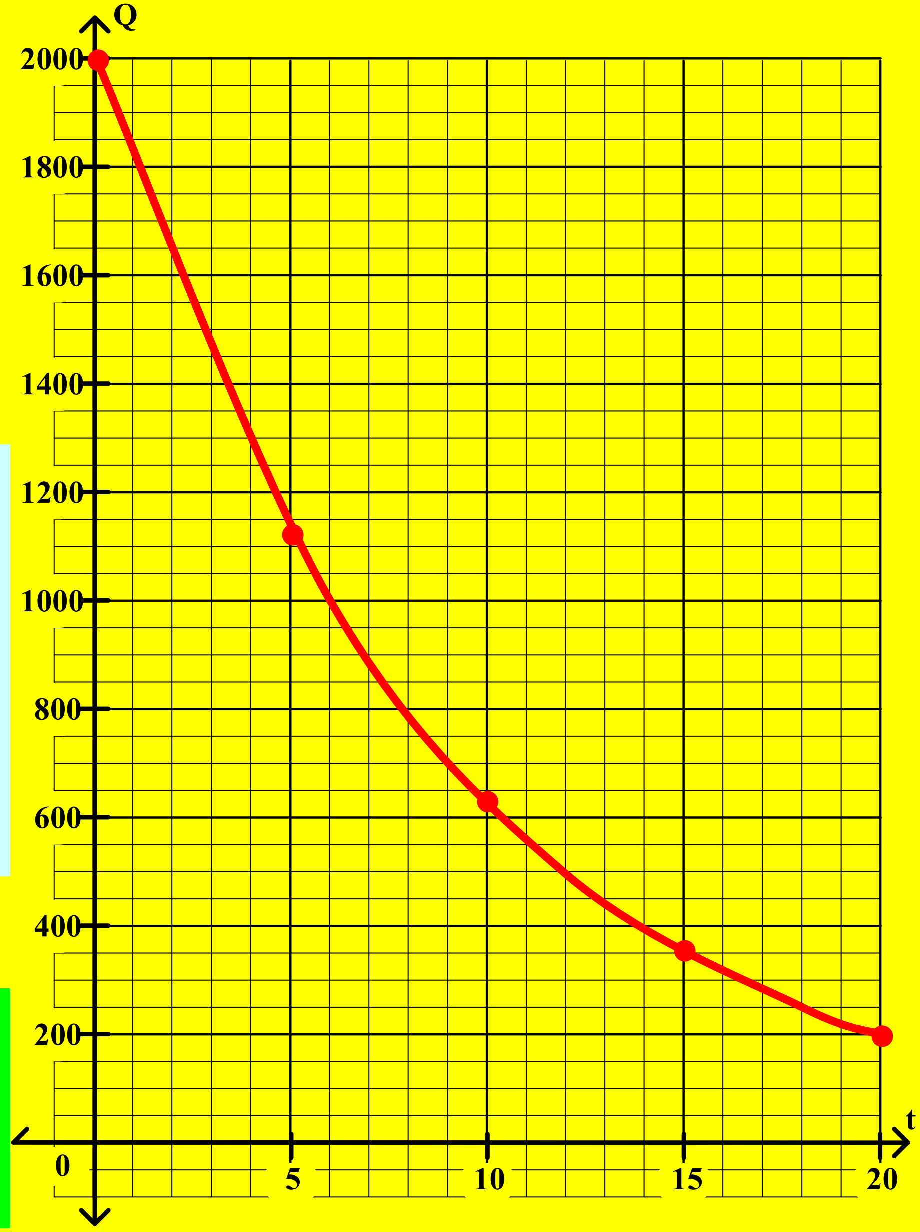

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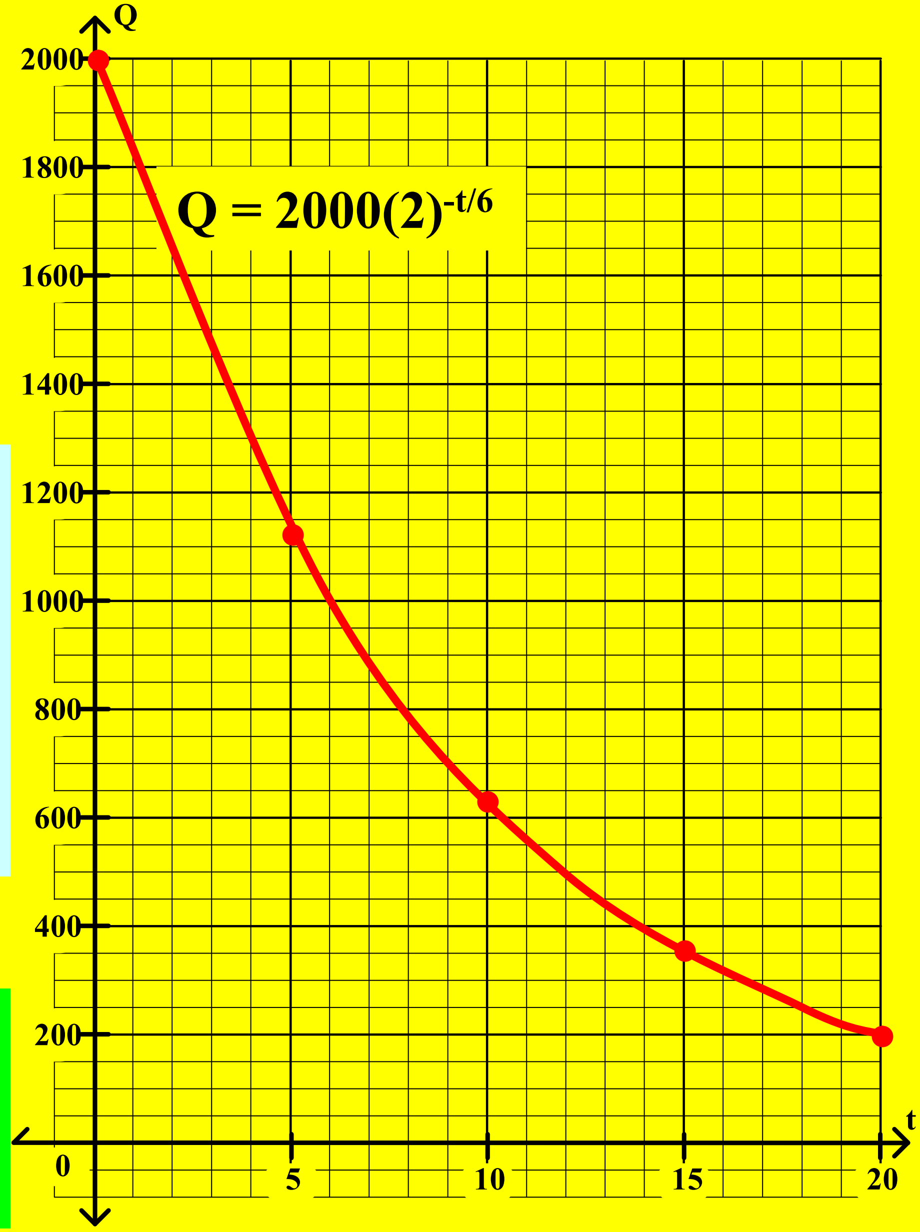

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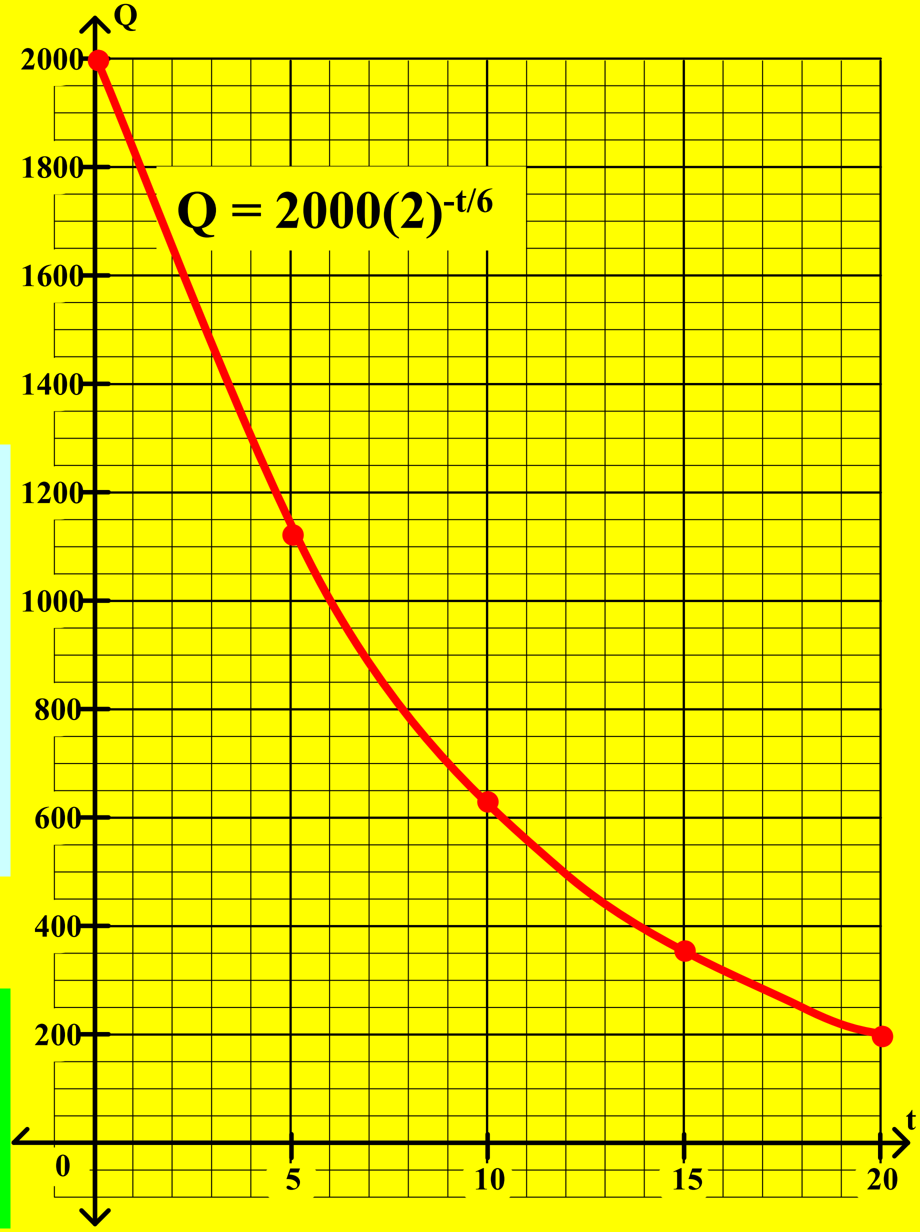

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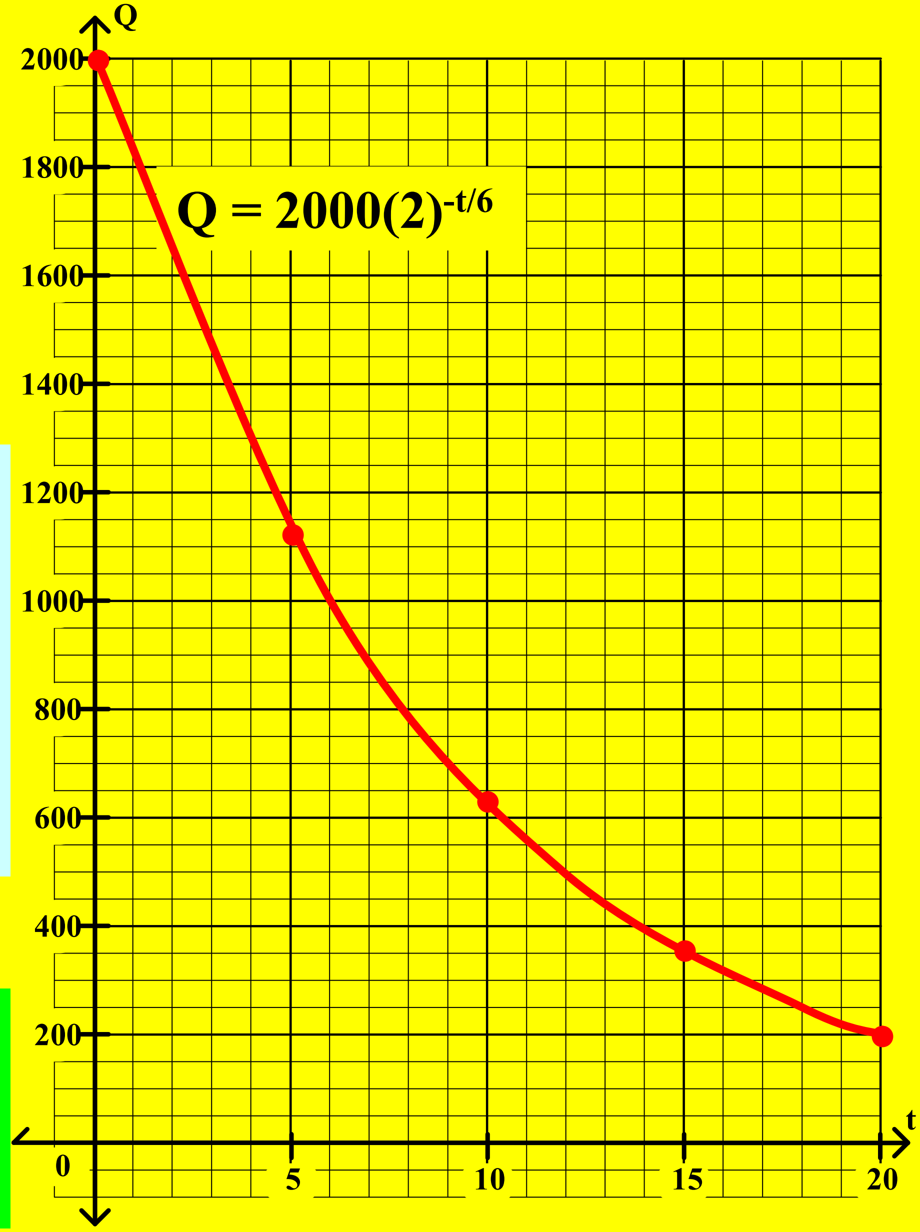

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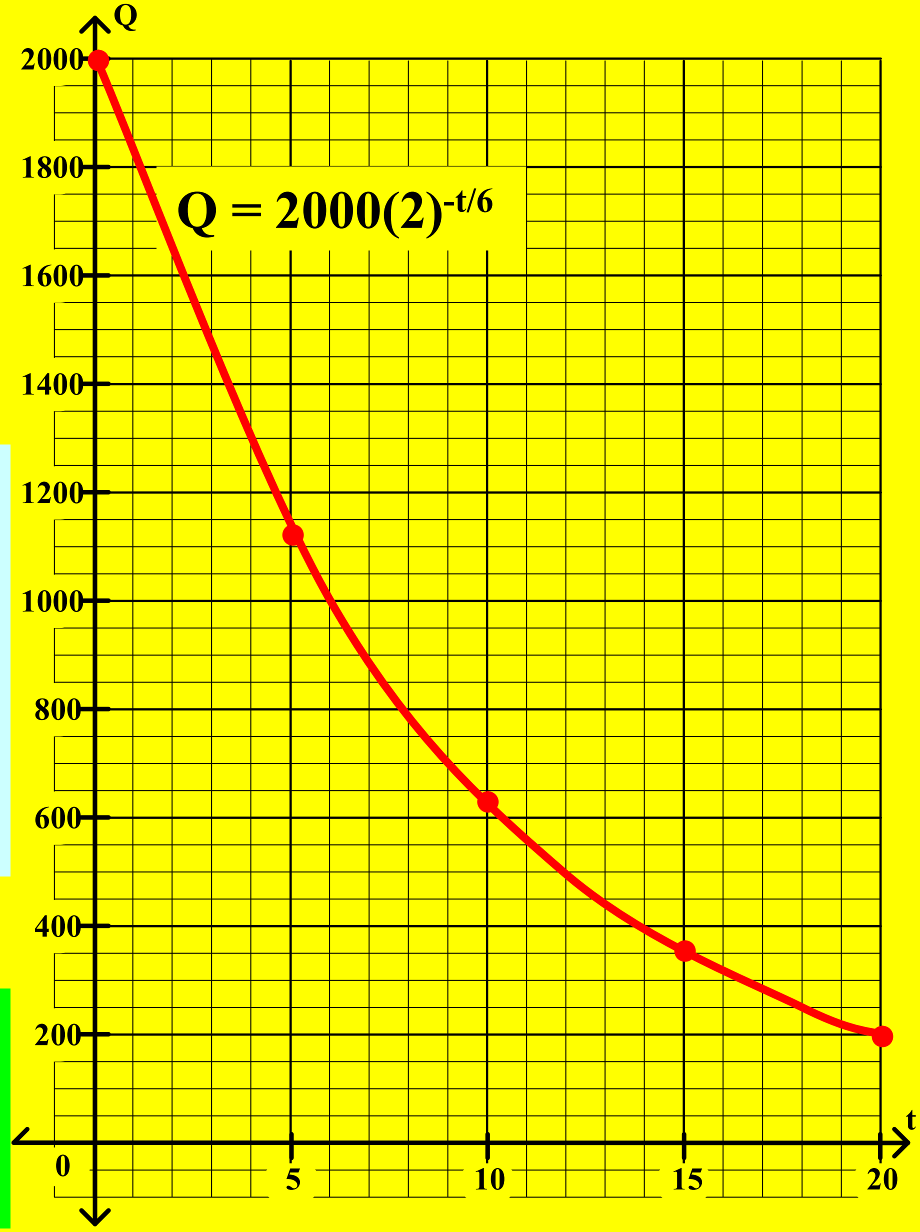

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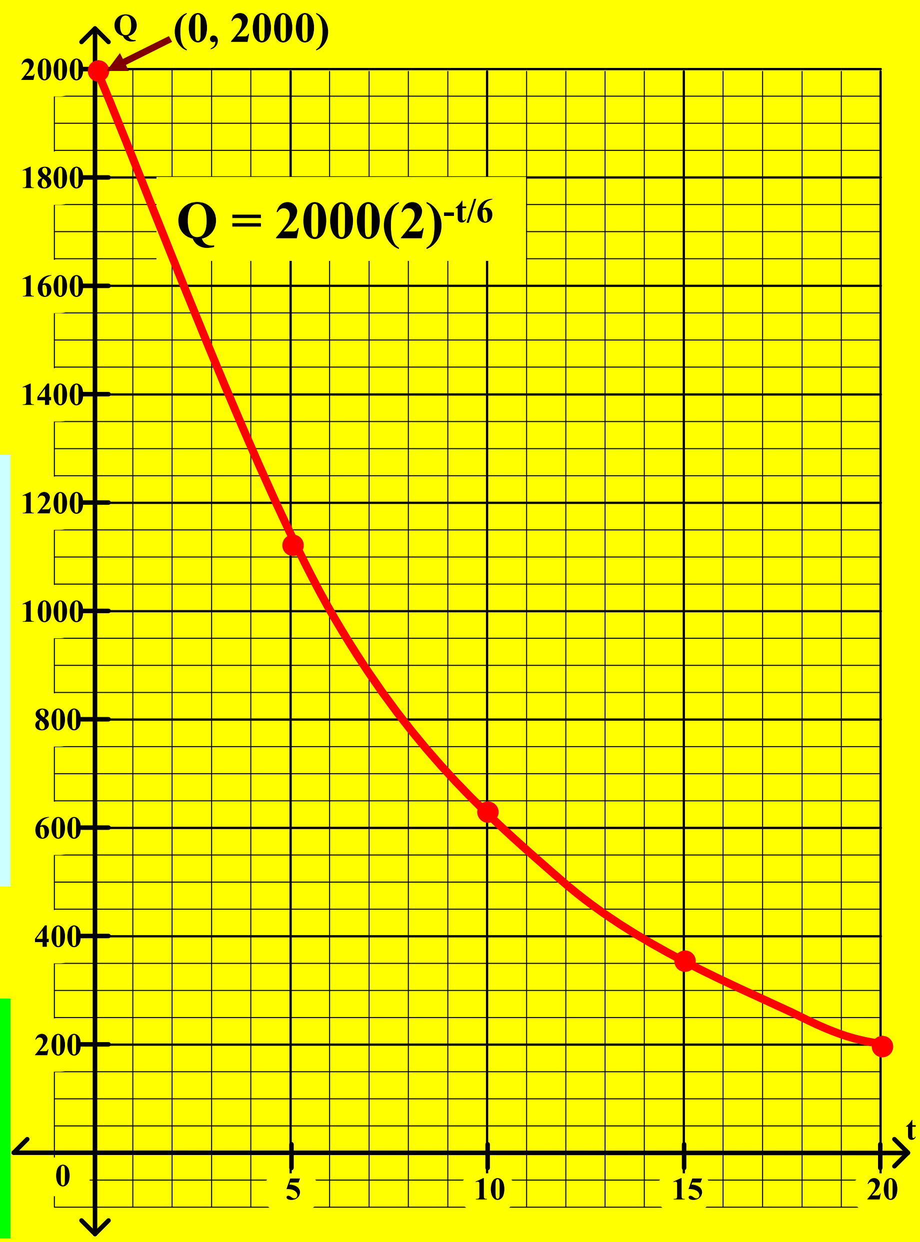

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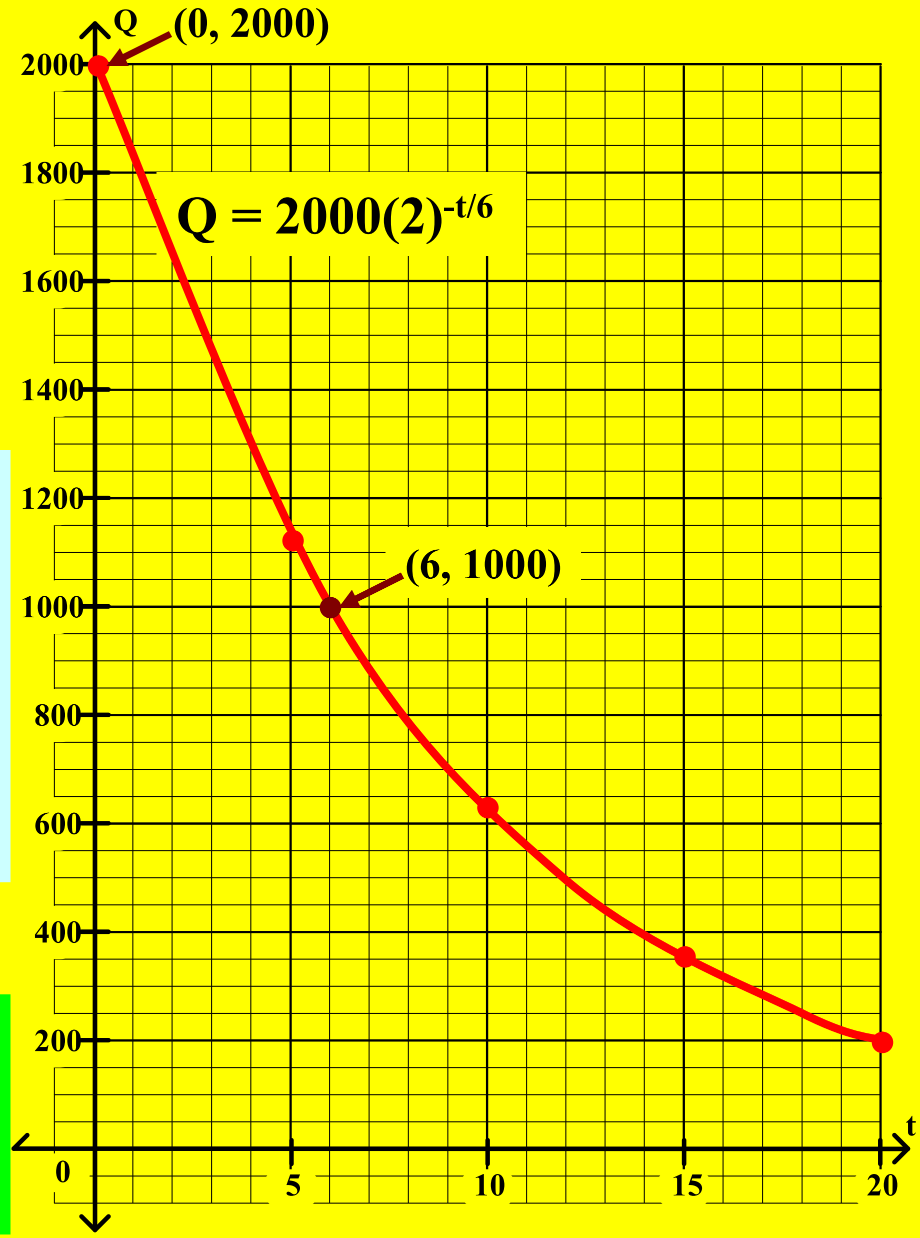

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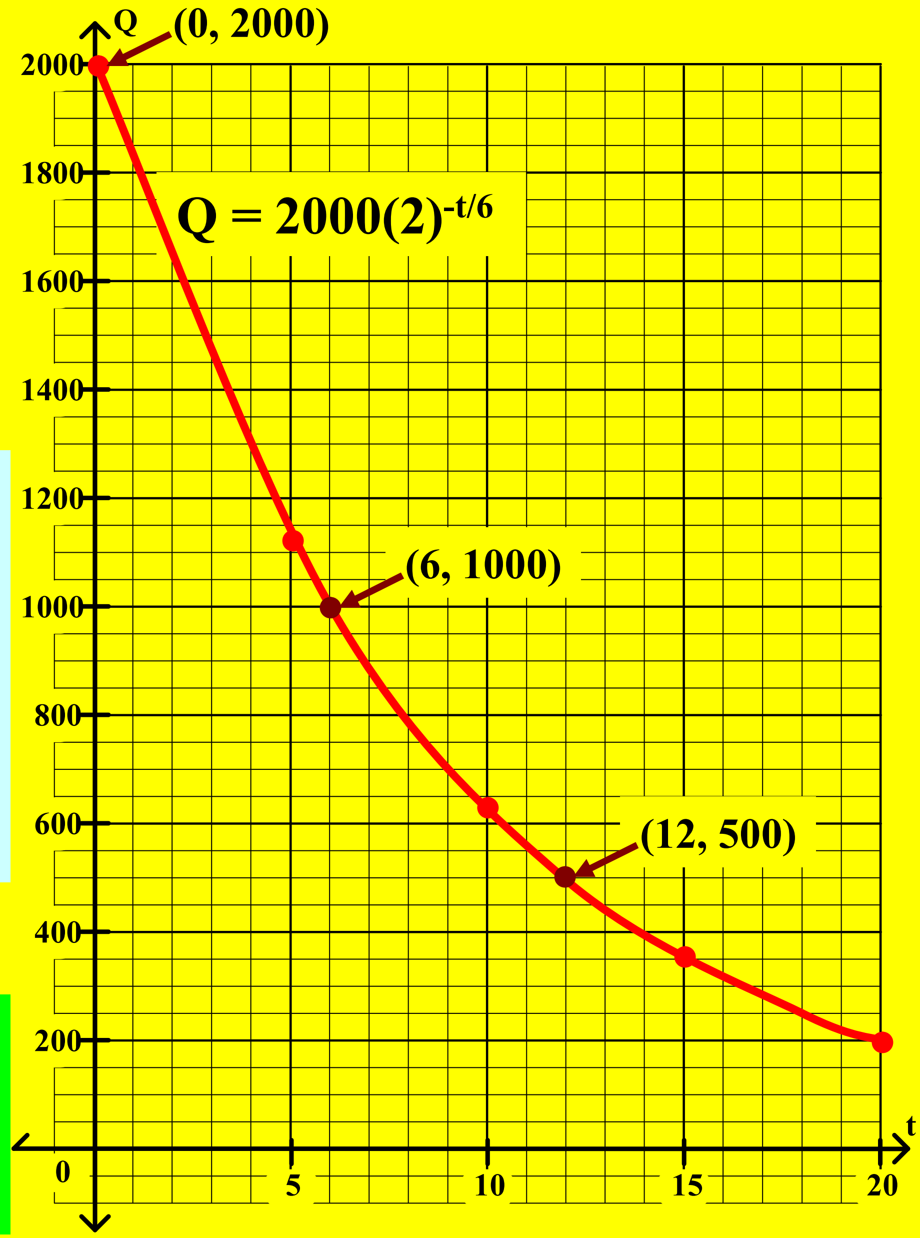

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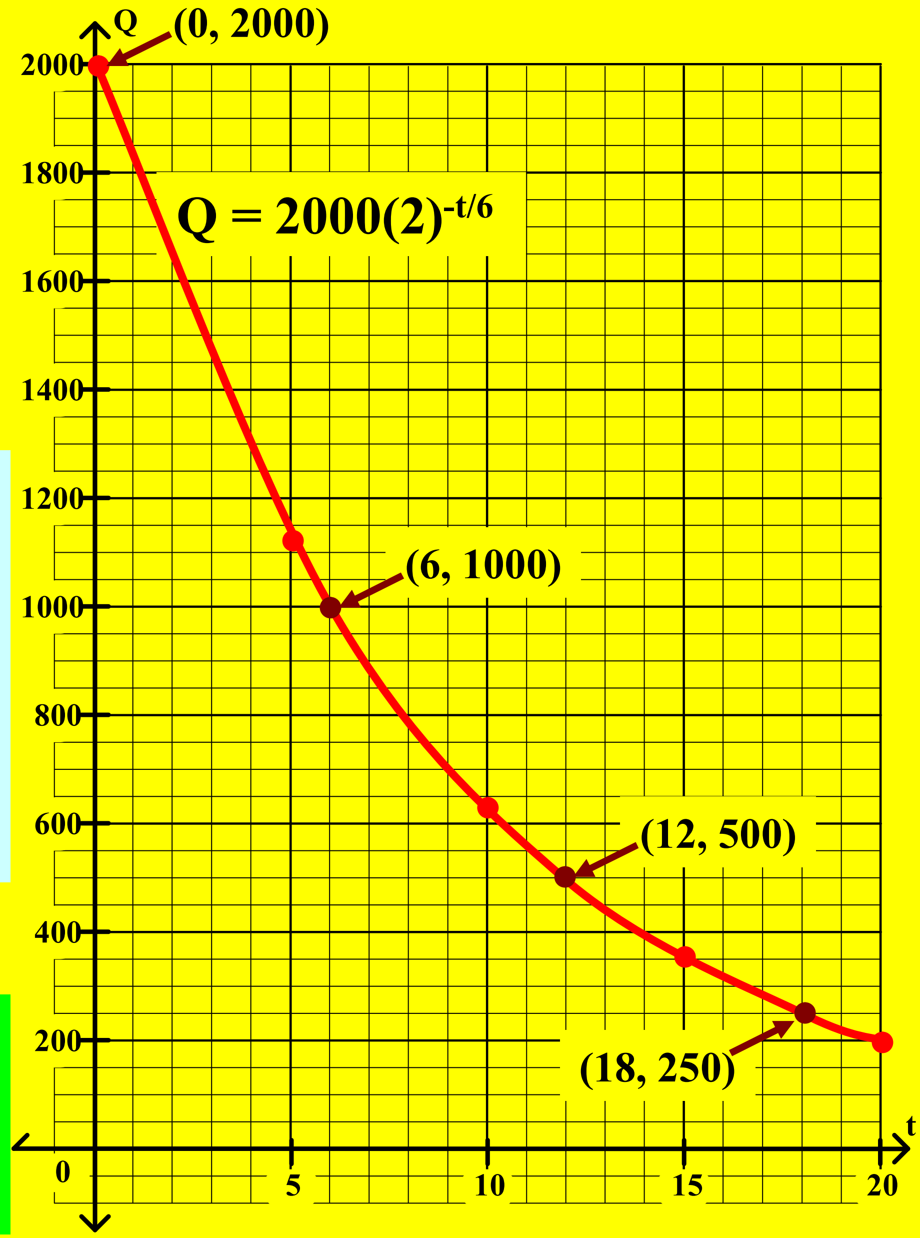

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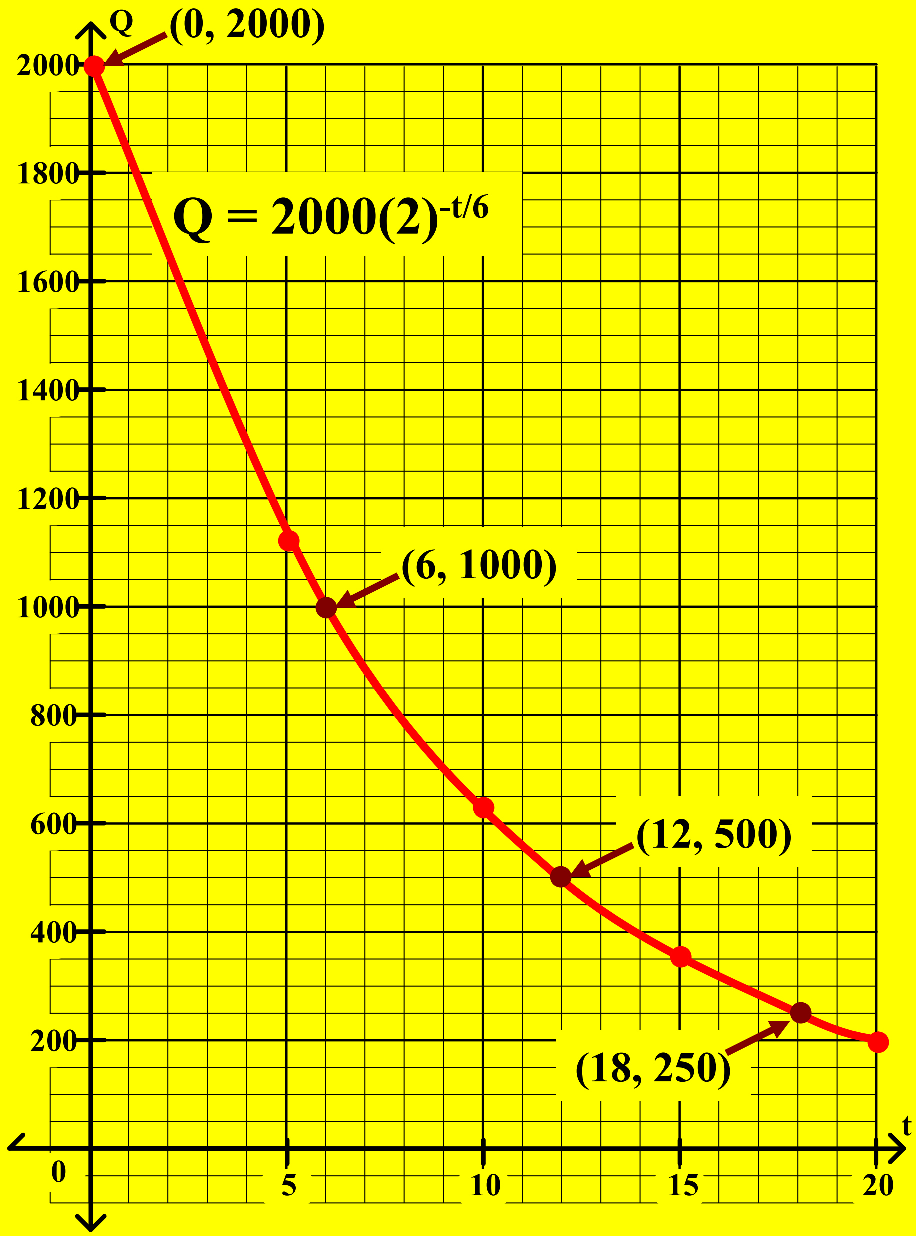

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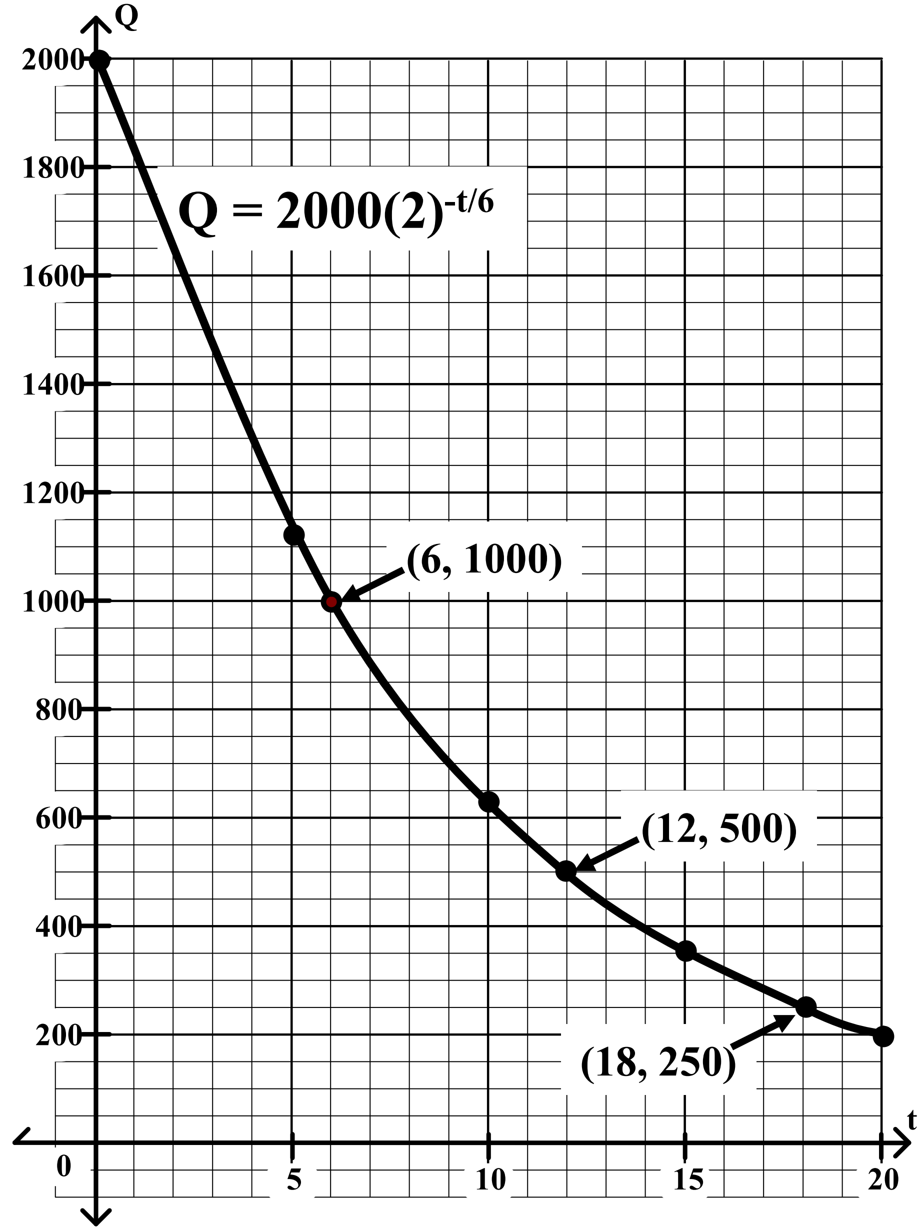

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Another application of exponential functions involves the real number e.

$$e \approx 2.718$$

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Consider the expression $\left[1 + \frac{1}{k}\right]^{k}$**. We will examine how the value of this expression changes as k increases.**

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Consider the expression $\left[1 + \frac{1}{k}\right]^k$**. We will examine how the value of this expression changes as k increases.**

k	
$\left[1 + \frac{1}{k}\right]^k$	

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Here is a 'definition' for the real number e.

Consider the expression $\left[1 + \frac{1}{k}\right]^{k}$. **We will examine how the value of this expression changes as k increases.**

k	**1**
$\left[1 + \frac{1}{k}\right]^{k}$	

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Consider the expression $\left[1 + \frac{1}{k}\right]^k$. **We will examine how the value of this expression changes as k increases.**

k	**1**
$\left[1 + \frac{1}{k}\right]^k$	

$$\left[1 + \frac{1}{k}\right]^k =$$

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Consider the expression $\left[1 + \frac{1}{k}\right]^k$. **We will examine how the value of this expression changes as k increases.**

k	**1**
$\left[1 + \frac{1}{k}\right]^k$	

$$\left[1 + \frac{1}{k}\right]^k = \left[1 + \frac{1}{1}\right]^1$$

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Here is a 'definition' for the real number e.

Consider the expression $\left[1+\frac{1}{k}\right]^{k}$**. We will examine how the value of this expression changes as k increases.**

k	1
$\left[1+\frac{1}{k}\right]^{k}$	

$$\left[1+\frac{1}{k}\right]^{k} = \left[1+\frac{1}{1}\right]^{1} = 2^{1}$$

Another application of exponential functions involves the real number e.

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Here is a 'definition' for the real number e.

Consider the expression $\left[1 + \frac{1}{k}\right]^k$**. We will examine how the value of this expression changes as k increases.**

k	1
$\left[1 + \frac{1}{k}\right]^k$	2

$$\left[1 + \frac{1}{k}\right]^k = \left[1 + \frac{1}{1}\right]^1 = 2^1$$

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Consider the expression $\left[1 + \frac{1}{k}\right]^k$**. We will examine how the value of this expression changes as k increases.**

k	**1**
$\left[1 + \frac{1}{k}\right]^k$	**2**

Another application of exponential functions involves the real number e.

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Here is a 'definition' for the real number e.

Consider the expression $\left[1 + \frac{1}{k}\right]^k$. **We will examine how the value of this expression changes as k increases.**

k	1	2
$\left[1 + \frac{1}{k}\right]^k$	2	

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Consider the expression $\left[1 + \frac{1}{k}\right]^k$. **We will examine how the value of this expression changes as k increases.**

k	**1**	**2**
$\left[1 + \frac{1}{k}\right]^k$	**2**	

$$\left[1 + \frac{1}{k}\right]^k =$$

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Consider the expression $\left[1 + \frac{1}{k}\right]^k$. **We will examine how the value of this expression changes as k increases.**

k	**1**	**2**
$\left[1 + \frac{1}{k}\right]^k$	**2**	

$$\left[1 + \frac{1}{k}\right]^k = \left[1 + \frac{1}{2}\right]^2$$

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Consider the expression $\left[1 + \frac{1}{k}\right]^{k}$. **We will examine how the value of this expression changes as k increases.**

k	1	2
$\left[1 + \frac{1}{k}\right]^{k}$	2	

$$\left[1 + \frac{1}{k}\right]^{k} = \left[1 + \frac{1}{2}\right]^{2} = 1.5^{2}$$

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Consider the expression $\left[1 + \frac{1}{k}\right]^k$**. We will examine how the value of this expression changes as k increases.**

k	1	2
$\left[1 + \frac{1}{k}\right]^k$	2	2.25

$$\left[1 + \frac{1}{k}\right]^k = \left[1 + \frac{1}{2}\right]^2 = 1.5^2$$

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Consider the expression $\left[1 + \frac{1}{k}\right]^k$. **We will examine how the value of this expression changes as k increases.**

k	1	2
$\left[1 + \frac{1}{k}\right]^k$	2	2.25

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Here is a 'definition' for the real number e.

Consider the expression $\left[1 + \frac{1}{k}\right]^k$. **We will examine how the value of this expression changes as k increases.**

k	1	2	3
$\left[1 + \frac{1}{k}\right]^k$	2	2.25	

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Here is a 'definition' for the real number e.

Consider the expression $\left[1 + \frac{1}{k}\right]^k$. We will examine how the value of this expression changes as k increases.

k	1	2	3
$\left[1 + \frac{1}{k}\right]^k$	2	2.25	

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Consider the expression $\left[1 + \frac{1}{k}\right]^k$. **We will examine how the value of this expression changes as k increases.**

k	1	2	3
$\left[1 + \frac{1}{k}\right]^k$	2	2.25	

$$\left[1 + \frac{1}{k}\right]^k = \left[1 + \frac{1}{3}\right]^3$$

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Consider the expression $\left[1 + \frac{1}{k}\right]^k$. **We will examine how the value of this expression changes as k increases.**

k	1	2	3
$\left[1 + \frac{1}{k}\right]^k$	2	2.25	

$$\left[1 + \frac{1}{k}\right]^k = \left[1 + \frac{1}{3}\right]^3 = (4/3)^3$$

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Consider the expression $\left[1 + \frac{1}{k}\right]^k$**. We will examine how the value of this expression changes as k increases.**

k	1	2	3
$\left[1 + \frac{1}{k}\right]^k$	2	2.25	64/27

$$\left[1 + \frac{1}{k}\right]^k = \left[1 + \frac{1}{3}\right]^3 = (4/3)^3$$

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Consider the expression $\left[1+\frac{1}{k}\right]^k$. **We will examine how the value of this expression changes as k increases.**

k	1	2	3
$\left[1+\frac{1}{k}\right]^k$	2	2.25	64/27 ≈ 2.378

$$\left[1+\frac{1}{k}\right]^k = \left[1+\frac{1}{3}\right]^3 = (4/3)^3$$

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k	1	2	3
$\left[1 + \frac{1}{k}\right]^k$	2	2.25	2.378

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Here is a ‘definition’ for the real number e.

Consider the expression $\left[1+\frac{1}{k}\right]^{k}$. **We will examine how the value of this expression changes as k increases.**

k	1	2	3	4
$\left[1+\frac{1}{k}\right]^{k}$	2	2.25	2.378	

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Here is a 'definition' for the real number e.

Consider the expression $\left[1 + \frac{1}{k}\right]^k$. **We will examine how the value of this expression changes as k increases.**

k	1	2	3	4
$\left[1 + \frac{1}{k}\right]^k$	2	2.25	2.378	

$$\left[1 + \frac{1}{k}\right]^k =$$

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Consider the expression $\left[1 + \frac{1}{k}\right]^k$. **We will examine how the value of this expression changes as k increases.**

k	1	2	3	4
$\left[1 + \frac{1}{k}\right]^k$	2	2.25	2.378	

$$\left[1 + \frac{1}{k}\right]^k = \left[1 + \frac{1}{4}\right]^4$$

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Consider the expression $\left[1 + \frac{1}{k}\right]^k$. **We will examine how the value of this expression changes as k increases.**

k	1	2	3	4
$\left[1 + \frac{1}{k}\right]^k$	2	2.25	2.378	

$$\left[1 + \frac{1}{k}\right]^k = \left[1 + \frac{1}{4}\right]^4 = (5/4)^4$$

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Here is a 'definition' for the real number e.

Consider the expression $\left[1 + \frac{1}{k}\right]^{k}$. **We will examine how the value of this expression changes as k increases.**

k	1	2	3	4
$\left[1 + \frac{1}{k}\right]^{k}$	2	2.25	2.378	625/256

$$\left[1 + \frac{1}{k}\right]^{k} = \left[1 + \frac{1}{4}\right]^{4} = (5/4)^{4}$$

Another application of exponential functions involves the real number e.

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Here is a 'definition' for the real number e.

Consider the expression $\left[1 + \frac{1}{k}\right]^{k}$. **We will examine how the value of this expression changes as k increases.**

k	1	2	3	4
$\left[1 + \frac{1}{k}\right]^{k}$	2	2.25	2.378	625/256 ≈ 2.441

$$\left[1 + \frac{1}{k}\right]^{k} = \left[1 + \frac{1}{4}\right]^{4} = (5/4)^{4}$$

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k	1	2	3	4
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Here is a 'definition' for the real number e.

Consider the expression $\left[1 + \frac{1}{k}\right]^k$. **We will examine how the value of this expression changes as k increases.**

k	1	2	3	4	5
$\left[1 + \frac{1}{k}\right]^k$	2	2.25	2.378	2.441	

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Here is a 'definition' for the real number e.

Consider the expression $\left[1 + \frac{1}{k}\right]^k$. **We will examine how the value of this expression changes as k increases.**

k	1	2	3	4	5
$\left[1 + \frac{1}{k}\right]^k$	2	2.25	2.378	2.441	

$$\left[1 + \frac{1}{k}\right]^k =$$

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$\left[1 + \frac{1}{k}\right]^k$	2	2.25	2.378	2.441	

$$\left[1 + \frac{1}{k}\right]^k = \left[1 + \frac{1}{5}\right]^5$$

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k	1	2	3	4	5
$\left[1 + \frac{1}{k}\right]^k$	2	2.25	2.378	2.441	

$$\left[1 + \frac{1}{k}\right]^k = \left[1 + \frac{1}{5}\right]^5 = (6/5)^5$$

Another application of exponential functions involves the real number e.

$$e \approx 2.718$$

Here is a 'definition' for the real number e.

Consider the expression $\left[1 + \frac{1}{k}\right]^k$. **We will examine how the value of this expression changes as k increases.**

k	1	2	3	4	5
$\left[1 + \frac{1}{k}\right]^k$	2	2.25	2.378	2.441	≈ 2.488

$$\left[1 + \frac{1}{k}\right]^k = \left[1 + \frac{1}{5}\right]^5 = (6/5)^5$$

Another application of exponential functions involves the real number e.

$$e \approx 2.718$$

Here is a 'definition' for the real number e.

Consider the expression $\left[1 + \frac{1}{k}\right]^k$. **We will examine how the value of this expression changes as k increases.**

k	1	2	3	4	5
$\left[1 + \frac{1}{k}\right]^k$	2	2.25	2.378	2.441	2.488

Another application of exponential functions involves the real number e.

$$e \approx 2.718$$

Here is a 'definition' for the real number e.

Consider the expression $\left[1 + \frac{1}{k}\right]^k$ **. We will examine how the value of this expression changes as k increases.**

k	1	2	3	4	5	10
$\left[1 + \frac{1}{k}\right]^k$	2	2.25	2.378	2.441	2.488	

Another application of exponential functions involves the real number e.

$$e \approx 2.718$$

Here is a 'definition' for the real number e.

Consider the expression $\left[1 + \frac{1}{k}\right]^k$. **We will examine how the value of this expression changes as k increases.**

k	1	2	3	4	5	10
$\left[1 + \frac{1}{k}\right]^k$	2	2.25	2.378	2.441	2.488	

$$\left[1 + \frac{1}{k}\right]^k =$$

Another application of exponential functions involves the real number e.

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Here is a 'definition' for the real number e.

Consider the expression $\left[1 + \frac{1}{k}\right]^k$. **We will examine how the value of this expression changes as k increases.**

k	1	2	3	4	5	10
$\left[1 + \frac{1}{k}\right]^k$	2	2.25	2.378	2.441	2.488	

$$\left[1 + \frac{1}{k}\right]^k = (1.1)^{10}$$

Another application of exponential functions involves the real number e.

$$e \approx 2.718$$

Here is a 'definition' for the real number e.

Consider the expression $\left[1 + \frac{1}{k}\right]^k$**. We will examine how the value of this expression changes as k increases.**

k	1	2	3	4	5	10
$\left[1 + \frac{1}{k}\right]^k$	2	2.25	2.378	2.441	2.488	$\approx$ 2.594

$$\left[1 + \frac{1}{k}\right]^k = (1.1)^{10}$$

Another application of exponential functions involves the real number e.

$$e \approx 2.718$$

Here is a 'definition' for the real number e.

Consider the expression $\left[1 + \frac{1}{k}\right]^k$**. We will examine how the value of this expression changes as k increases.**

k	1	2	3	4	5	10
$\left[1 + \frac{1}{k}\right]^k$	2	2.25	2.378	2.441	2.488	2.594

Another application of exponential functions involves the real number e.

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Here is a 'definition' for the real number e.

Consider the expression $\left[1 + \frac{1}{k}\right]^k$. **We will examine how the value of this expression changes as k increases.**

k	1	2	3	4	5	10	50
$\left[1 + \frac{1}{k}\right]^k$	2	2.25	2.378	2.441	2.488	2.594	

Another application of exponential functions involves the real number e.

$$e \approx 2.718$$

Here is a 'definition' for the real number e.

Consider the expression $\left[1 + \frac{1}{k}\right]^k$. **We will examine how the value of this expression changes as k increases.**

k	1	2	3	4	5	10	50
$\left[1 + \frac{1}{k}\right]^k$	2	2.25	2.378	2.441	2.488	2.594	

$$\left[1 + \frac{1}{k}\right]^k =$$

Another application of exponential functions involves the real number e.

$$e \approx 2.718$$

Here is a 'definition' for the real number e.

Consider the expression $\left[1 + \frac{1}{k}\right]^k$. **We will examine how the value of this expression changes as k increases.**

k	1	2	3	4	5	10	50
$\left[1 + \frac{1}{k}\right]^k$	2	2.25	2.378	2.441	2.488	2.594	

$$\left[1 + \frac{1}{k}\right]^k = (1.02)^{50}$$

Another application of exponential functions involves the real number e.

$$e \approx 2.718$$

Here is a 'definition' for the real number e.

Consider the expression $\left[1 + \frac{1}{k}\right]^k$. **We will examine how the value of this expression changes as k increases.**

k	1	2	3	4	5	10	50
$\left[1 + \frac{1}{k}\right]^k$	2	2.25	2.378	2.441	2.488	2.594	≈ 2.692

$$\left[1 + \frac{1}{k}\right]^k = (1.02)^{50}$$

Another application of exponential functions involves the real number e.

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Here is a 'definition' for the real number e.

Consider the expression $\left[1 + \frac{1}{k}\right]^k$. **We will examine how the value of this expression changes as k increases.**

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k	1	2	3	4	5	10	50	100
$\left[1 + \frac{1}{k}\right]^k$	2	2.25	2.378	2.441	2.488	2.594	2.692	

Another application of exponential functions involves the real number e.

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k	1	2	3	4	5	10	50	100
$\left[1 + \frac{1}{k}\right]^k$	2	2.25	2.378	2.441	2.488	2.594	2.692	

$$\left[1 + \frac{1}{k}\right]^k = (1.01)^{100}$$

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Here is a 'definition' for the real number e.

Consider the expression $\left[1 + \frac{1}{k}\right]^k$. **We will examine how the value of this expression changes as k increases.**

k	1	2	3	4	5	10	50	100
$\left[1 + \frac{1}{k}\right]^k$	2	2.25	2.378	2.441	2.488	2.594	2.692	$\approx$ 2.705

$$\left[1 + \frac{1}{k}\right]^k = (1.01)^{100}$$

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Here is a 'definition' for the real number e.

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k	1	2	3	4	5	10	50	100
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$\left[1 + \frac{1}{k}\right]^k$	2	2.25	2.378	2.441	2.488	2.594	2.692	2.705	

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k	1	2	3	4	5	10	50	100	1000
$\left[1 + \frac{1}{k}\right]^k$	2	2.25	2.378	2.441	2.488	2.594	2.692	2.705	≈ 2.717

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k	1	2	3	4	5	10	50	100	1000
$\left[1 + \frac{1}{k}\right]^k$	2	2.25	2.378	2.441	2.488	2.594	2.692	2.705	2.717

k	
$\left[1 + \frac{1}{k}\right]^k$	

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k	1	2	3	4	5	10	50	100	1000
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$$A = P(1 + \frac{R}{N})^{Nt}$$

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Another application of exponential functions involves the real number e.

$$e = \lim_{k \Rightarrow \infty} \left[1 + \frac{1}{k}\right]^k \approx 2.718$$

Now, we will turn our attention to the compound interest formula.

$$A = P(1 + \frac{R}{N})^{Nt}$$

$$\text{Let } k = \frac{N}{R} \quad \Rightarrow \quad \frac{R}{N} = \frac{1}{k} \quad \text{and} \quad N = kR$$

$$\Rightarrow \quad A = P(1 + \frac{1}{k})^{(kR)t} = P[(1 + \frac{1}{k})^k]^{Rt}$$

$$\Rightarrow \quad A = Pe$$

Recall that N represents the number of times per year that the interest is compounded. Clearly, as N increases, k increases as well. Consider what 'happens' as N (and k) approach infinity. This expression approaches e as its limiting value.

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Let $k = \frac{N}{R}$ ⇨ $\frac{R}{N} = \frac{1}{k}$ and $N = kR$

⇨ $A = P(1 + \frac{1}{k})^{(kR)t} = P[(1 + \frac{1}{k})^k]^{Rt}$

⇨ $A = Pe^{Rt}$

Recall that N represents the number of times per year that the interest is compounded. Clearly, as N increases, k increases as well. Consider what ‘happens’ as N (and k) approach infinity. This expression approaches e as its limiting value.

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$$\text{Let } k = \frac{N}{R} \Rightarrow \frac{R}{N} = \frac{1}{k} \quad \text{and} \quad N = kR$$

$$\Rightarrow A = P\left(1 + \frac{1}{k}\right)^{(kR)t} = P\left[\left(1 + \frac{1}{k}\right)^k\right]^{Rt}$$

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⇨ $A = Pe^{Rt}$

Recall that N represents the number of times per year that the interest is compounded. Clearly, as N increases, k increases as well. Consider what 'happens' as N (and k) approach infinity. This expression approaches e as its limiting value. This is called the 'continuously compounded interest' formula.

Algebra II   Class Worksheet #4   Unit 10

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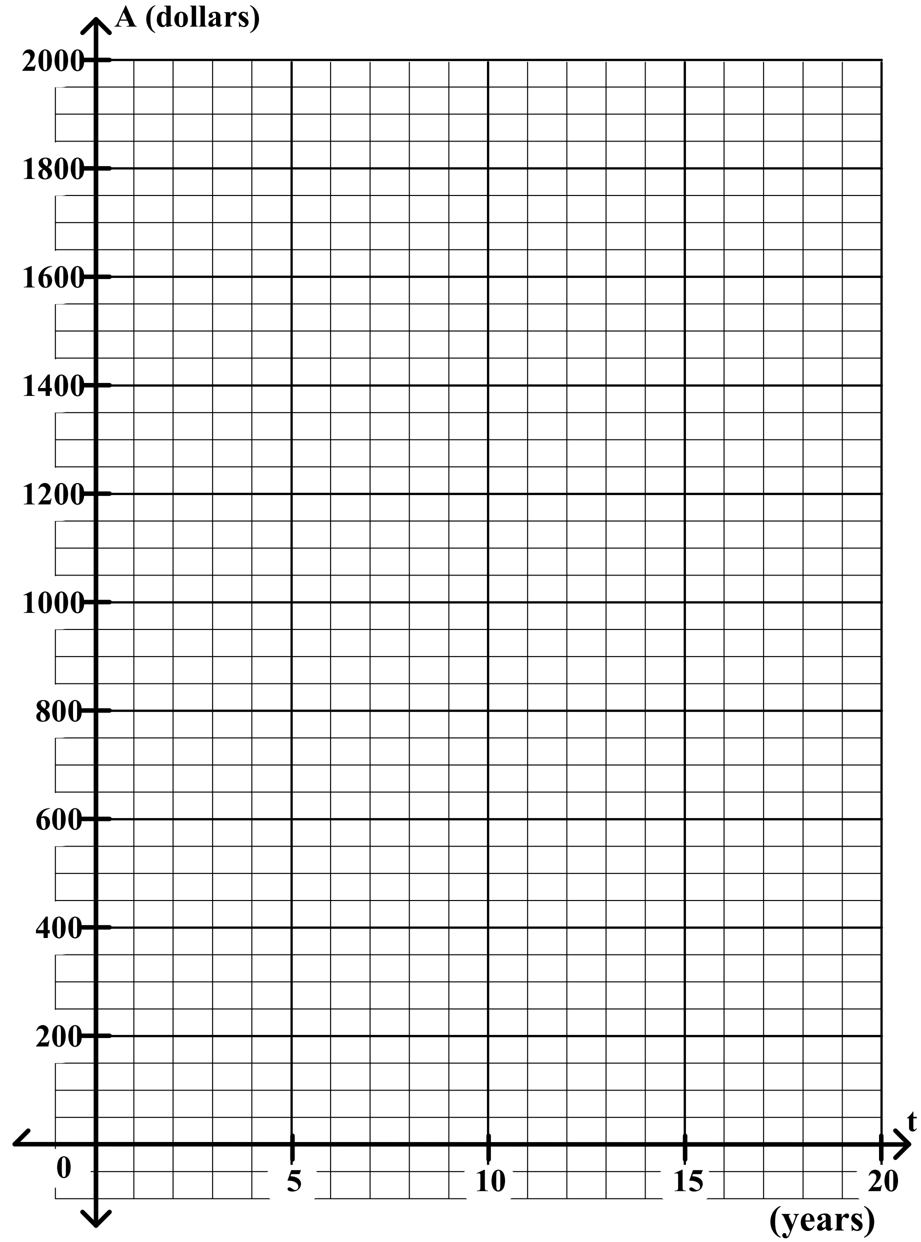

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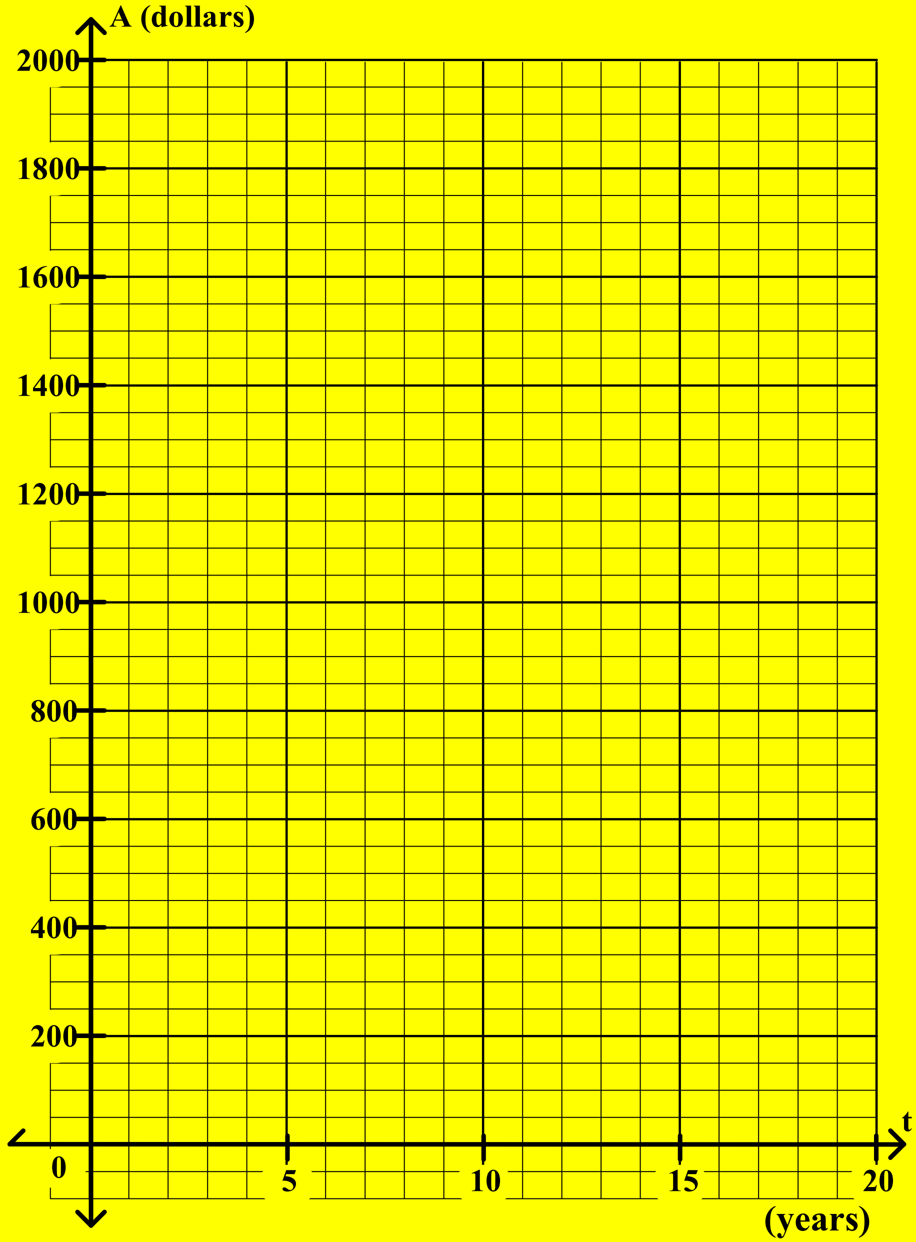

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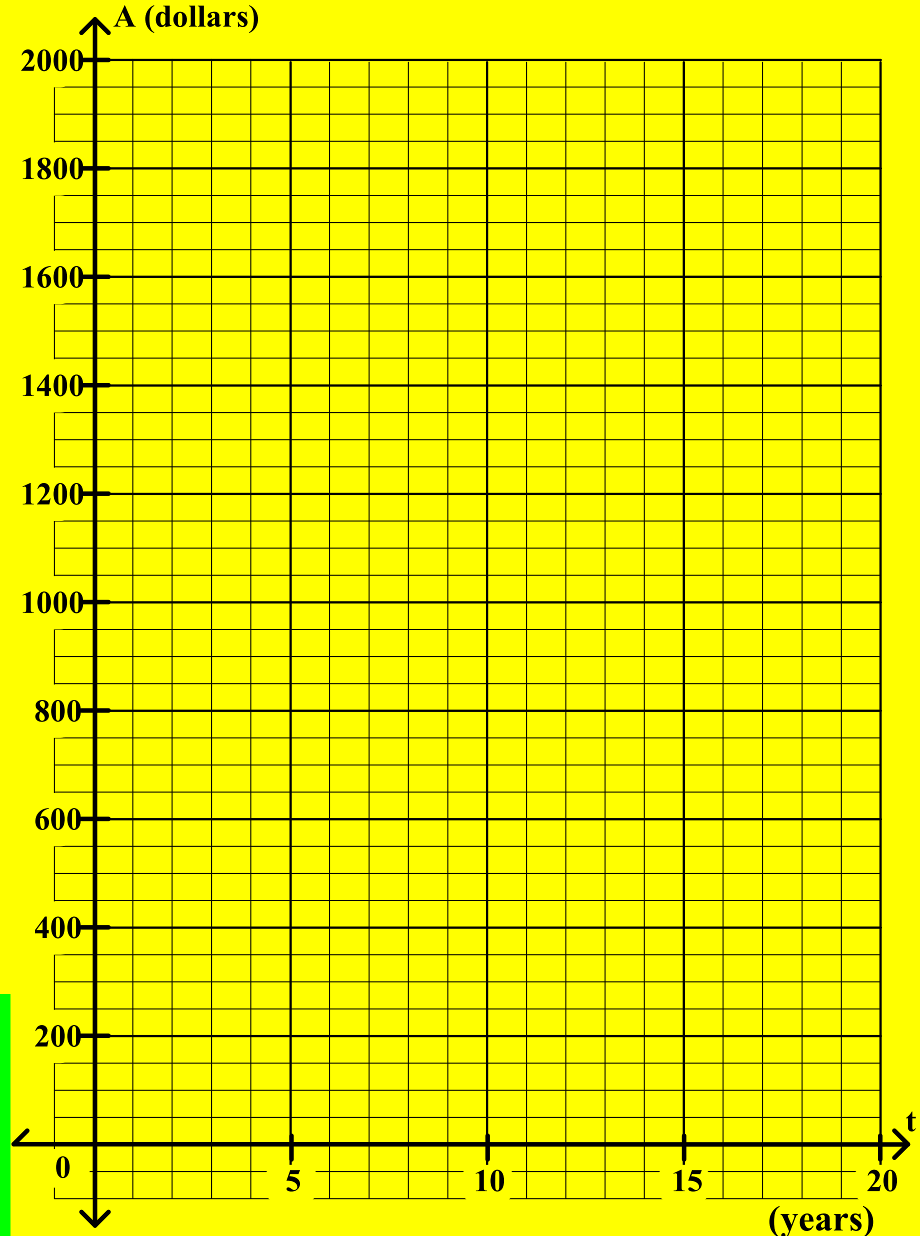

Write the continuously compounded interest formula.

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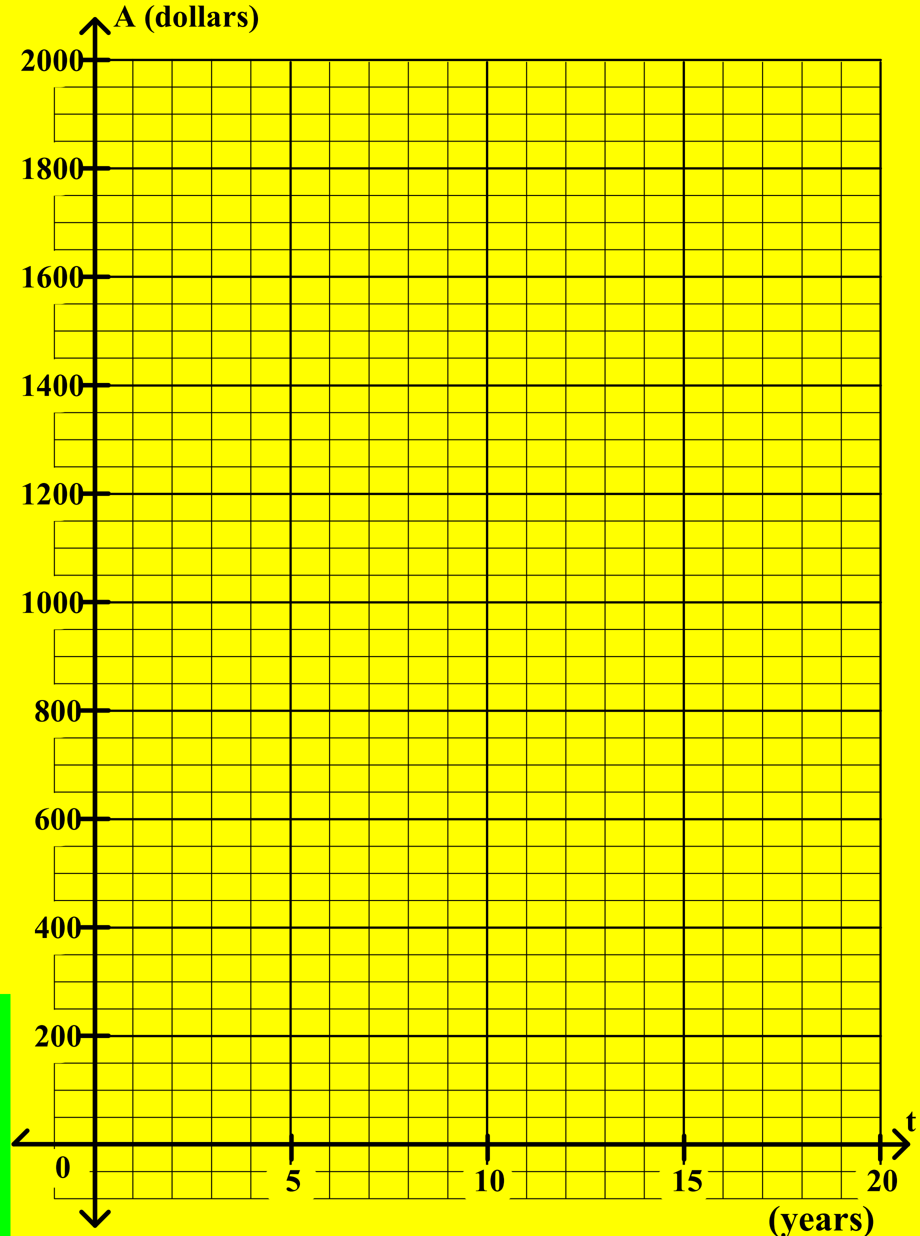

$$A = Pe^{Rt}$$

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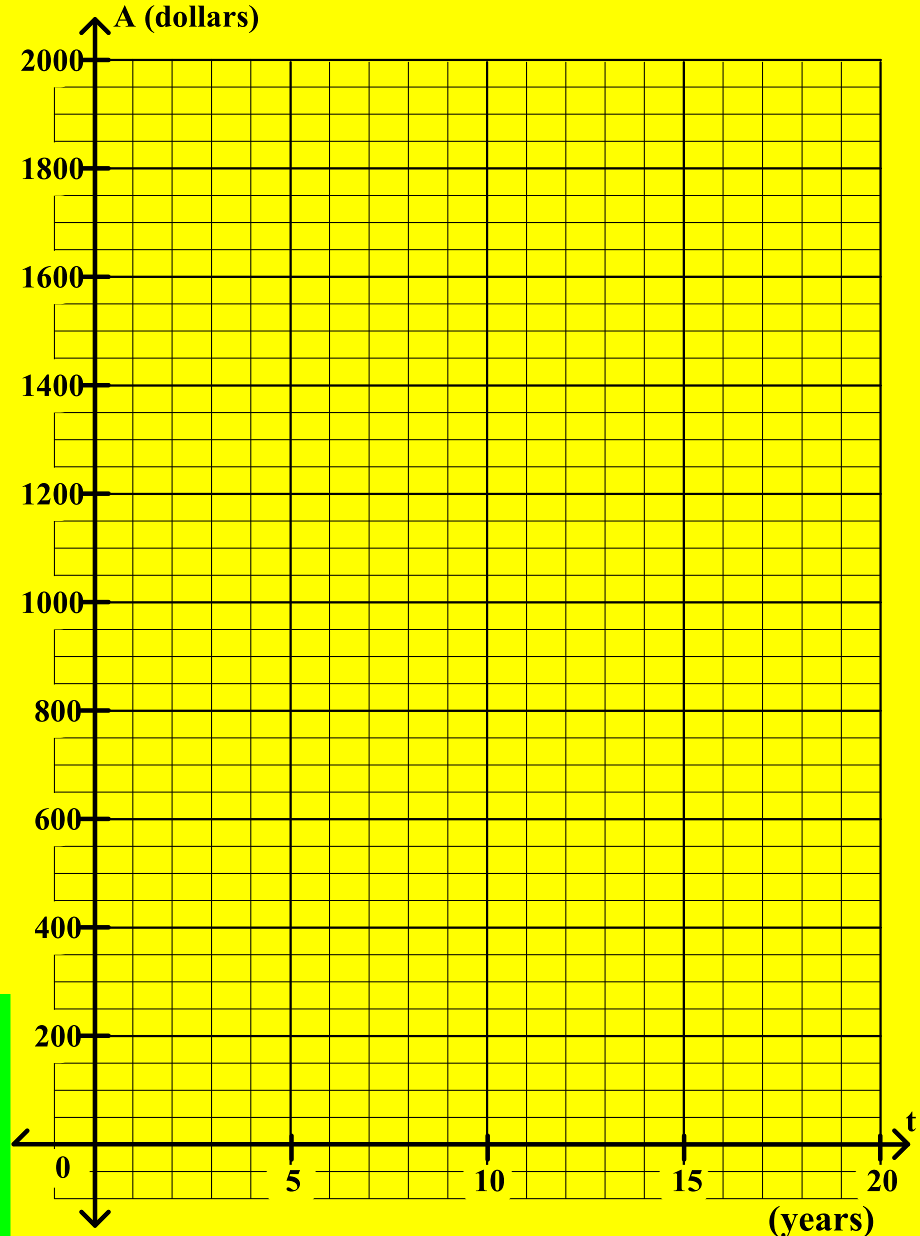
Write the continuously compounded interest formula. Substitute in the values of P and R.



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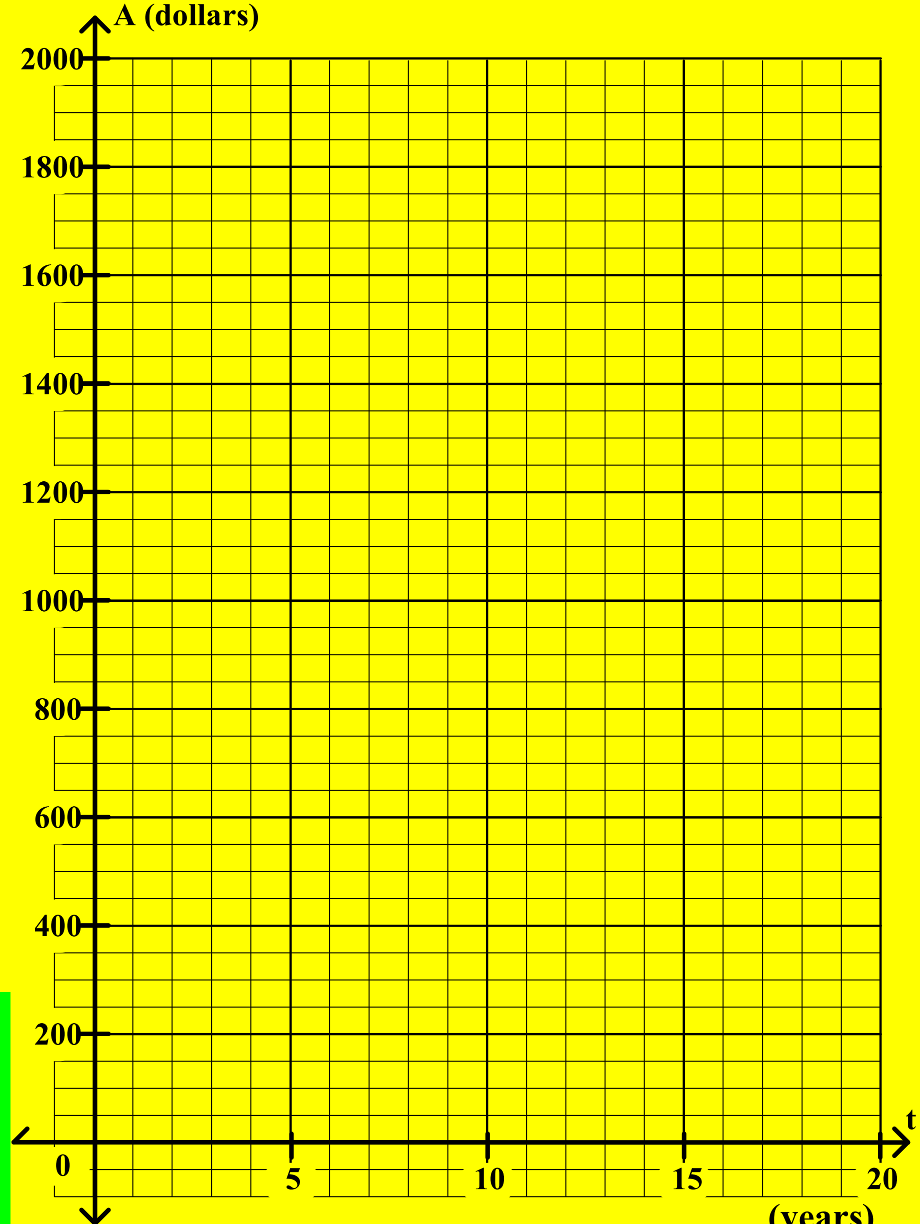

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P = 600 (dollars)

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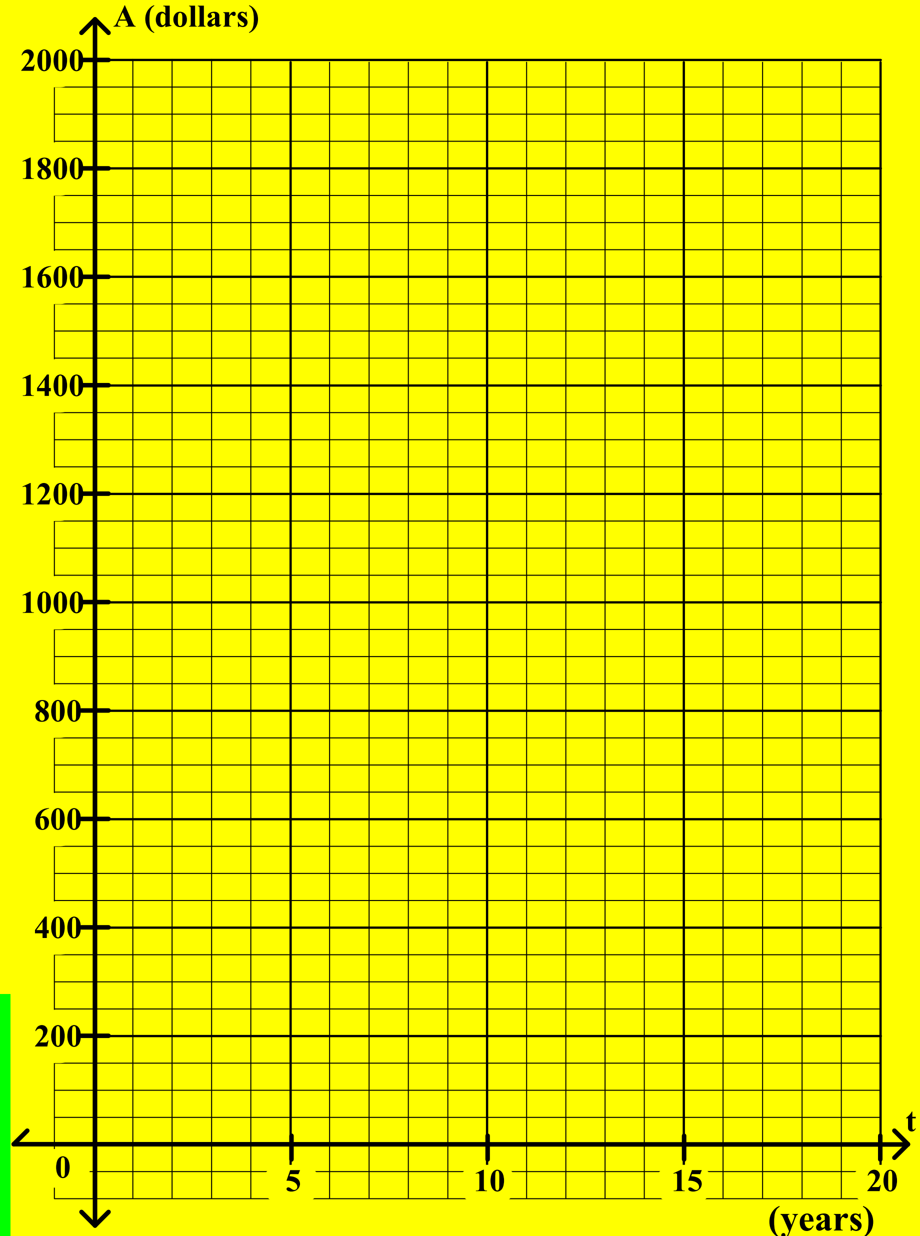

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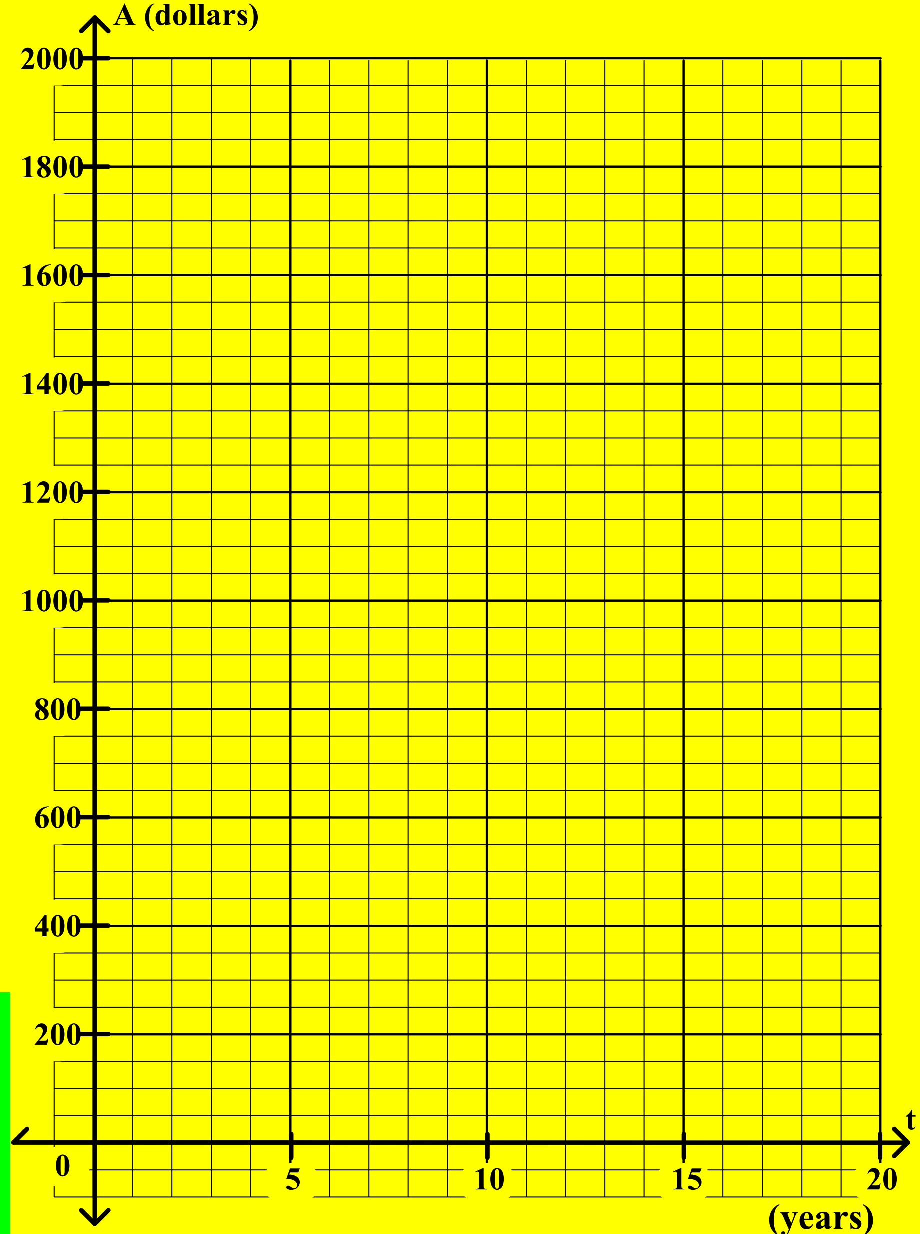

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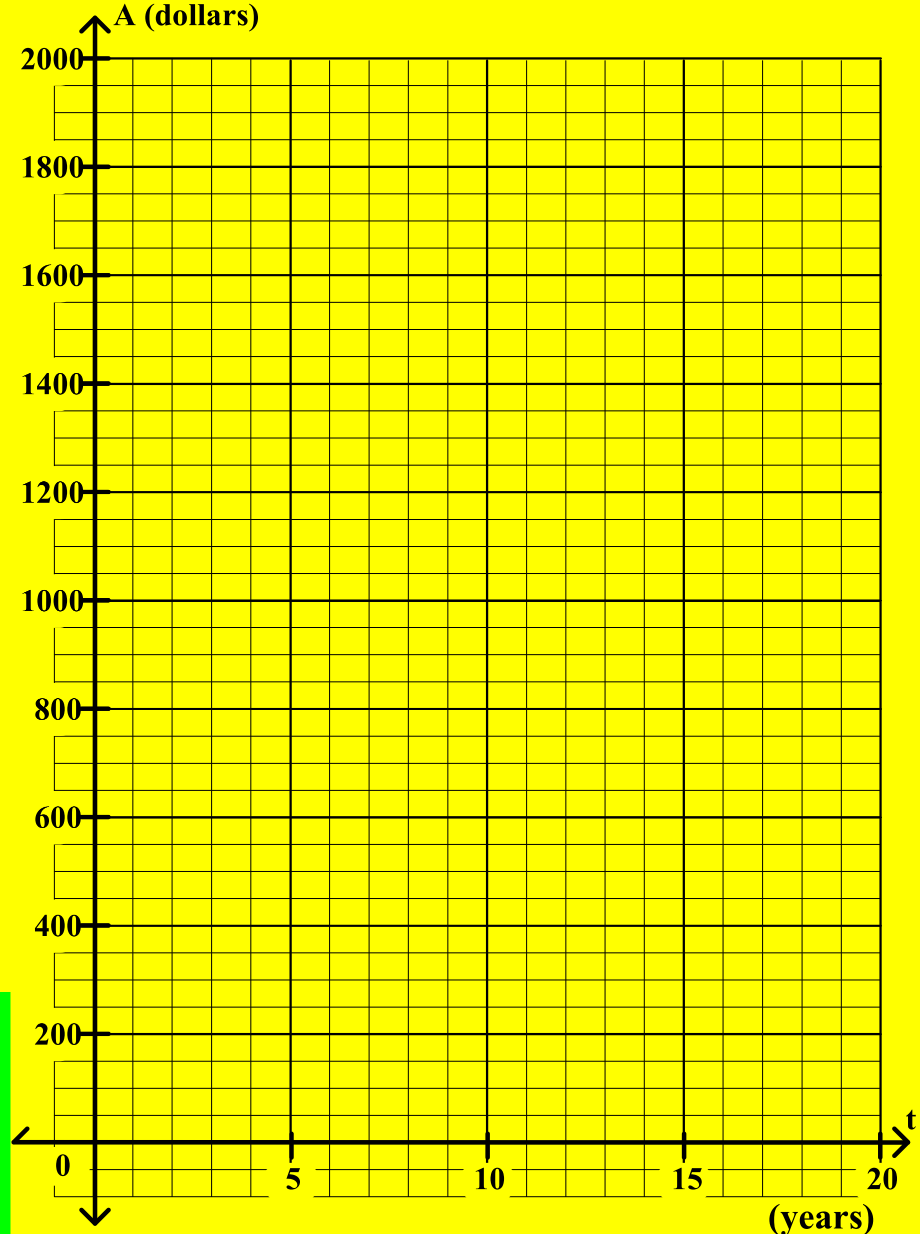

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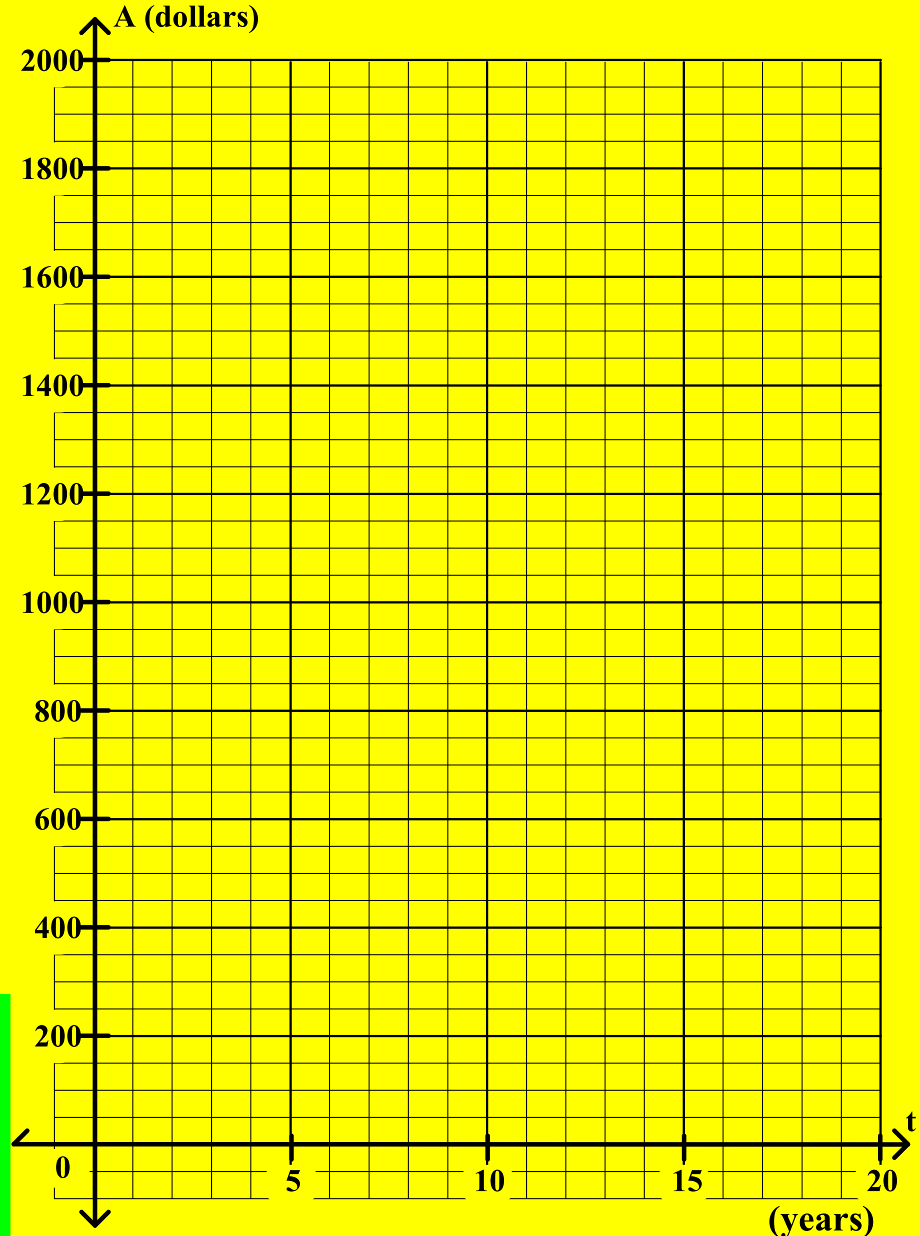

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P = 600 (dollars)

R = 0.06

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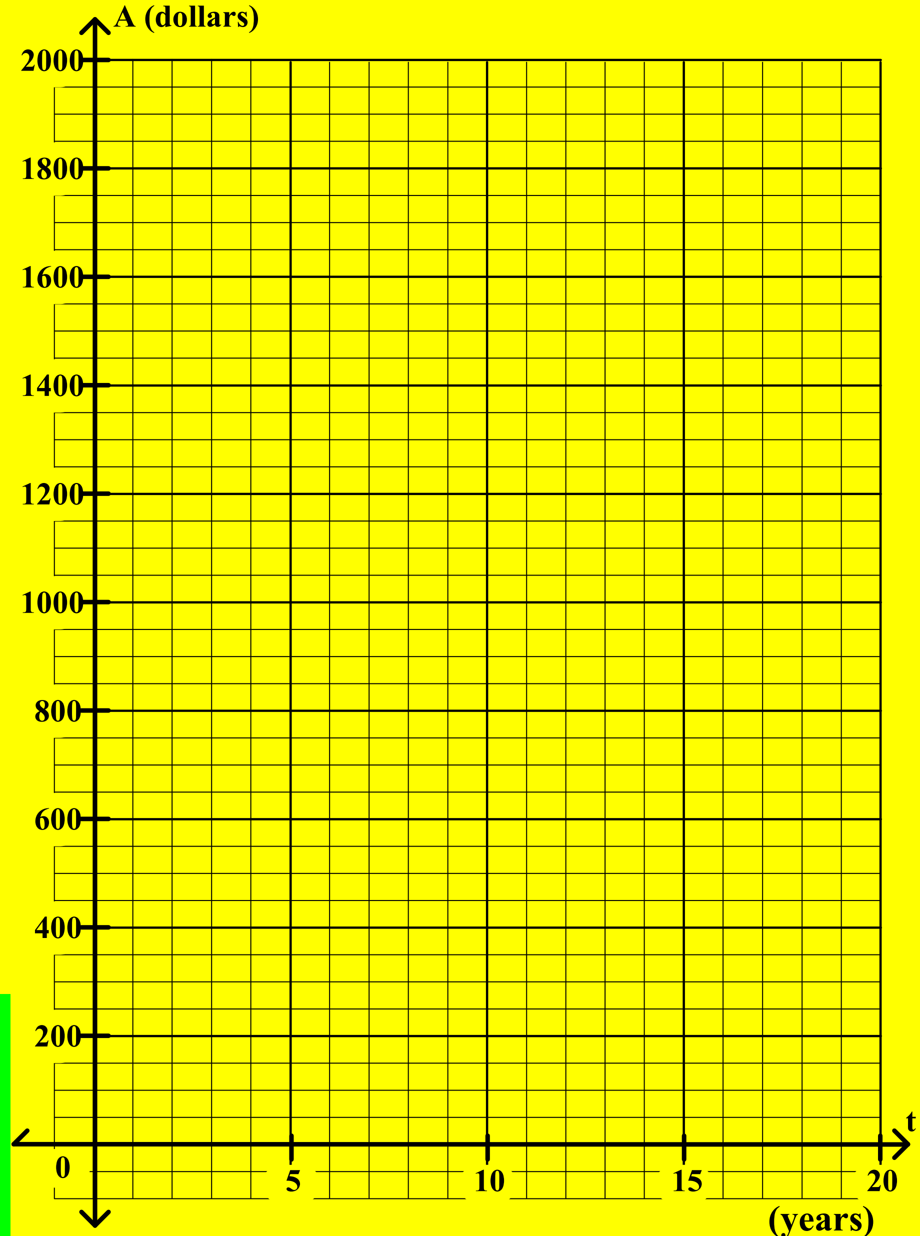

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R = 0.06

A =

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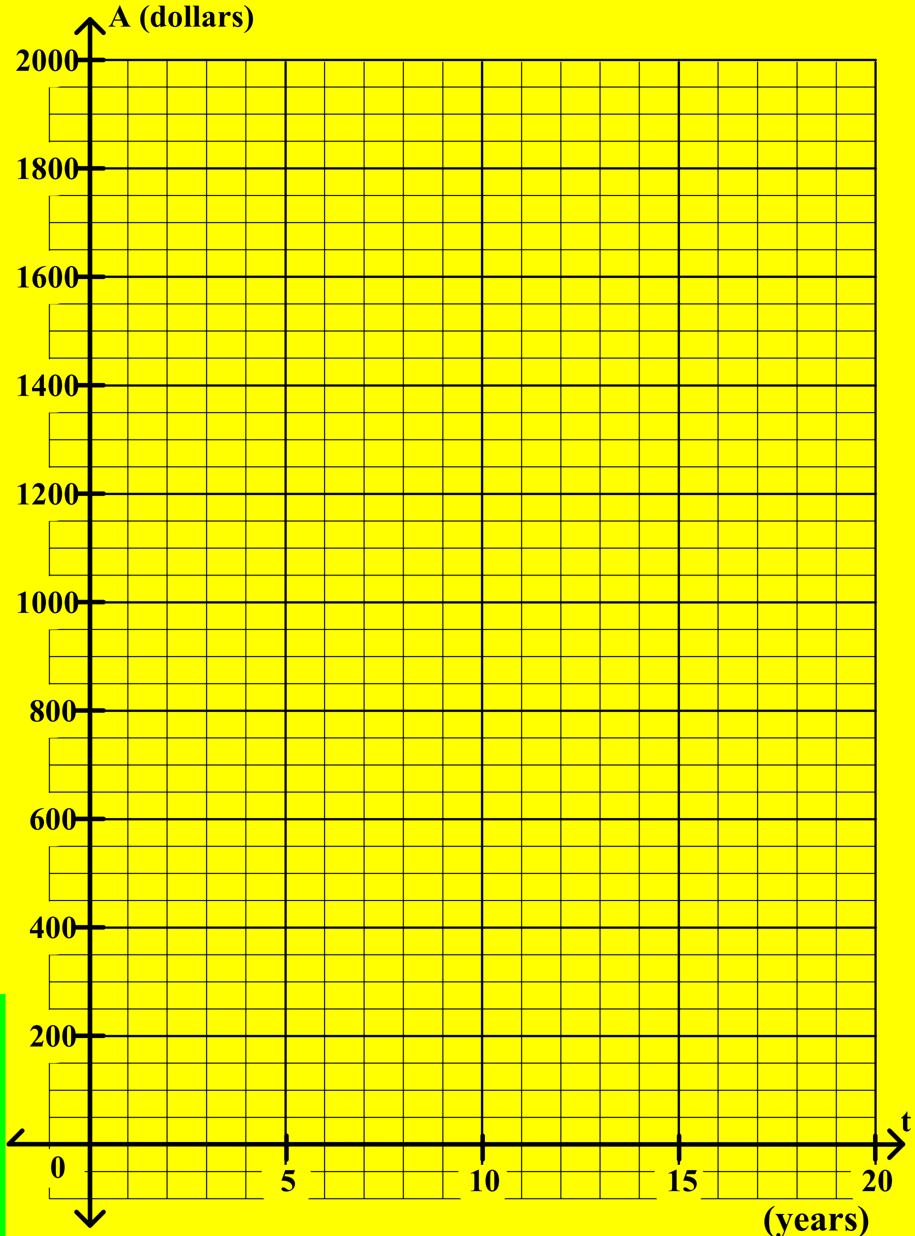

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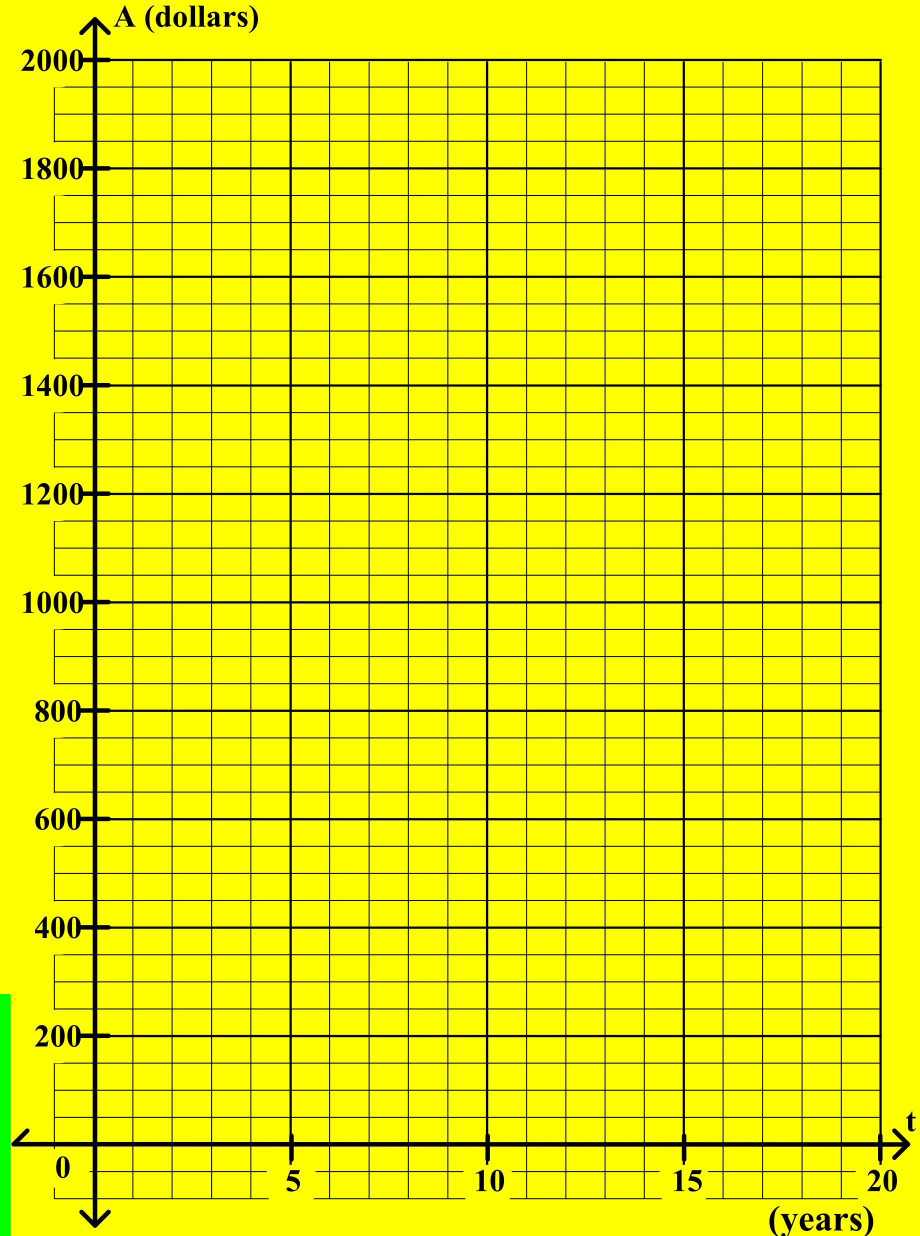

$$A = Pe^{Rt}$$

P = 600 (dollars)

R = 0.06

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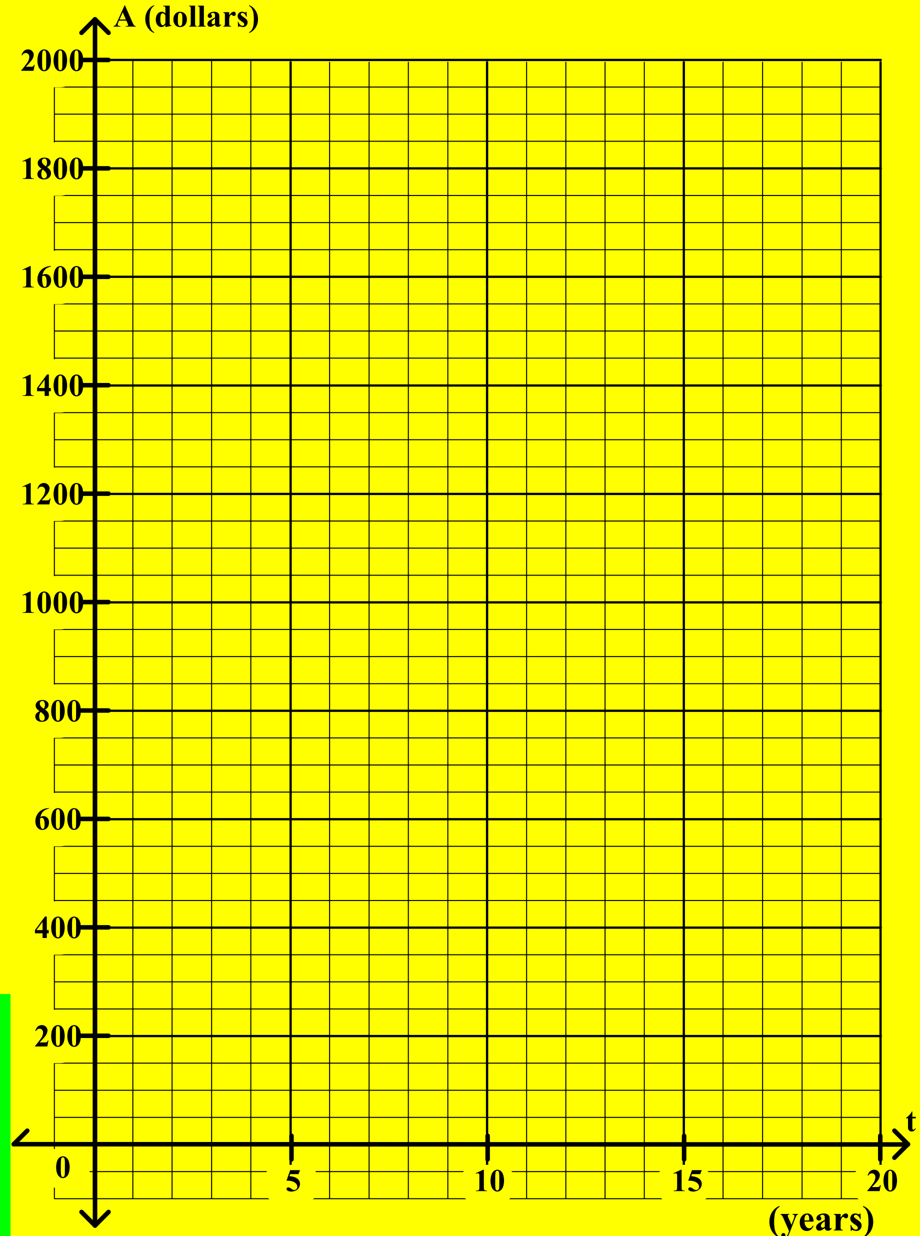

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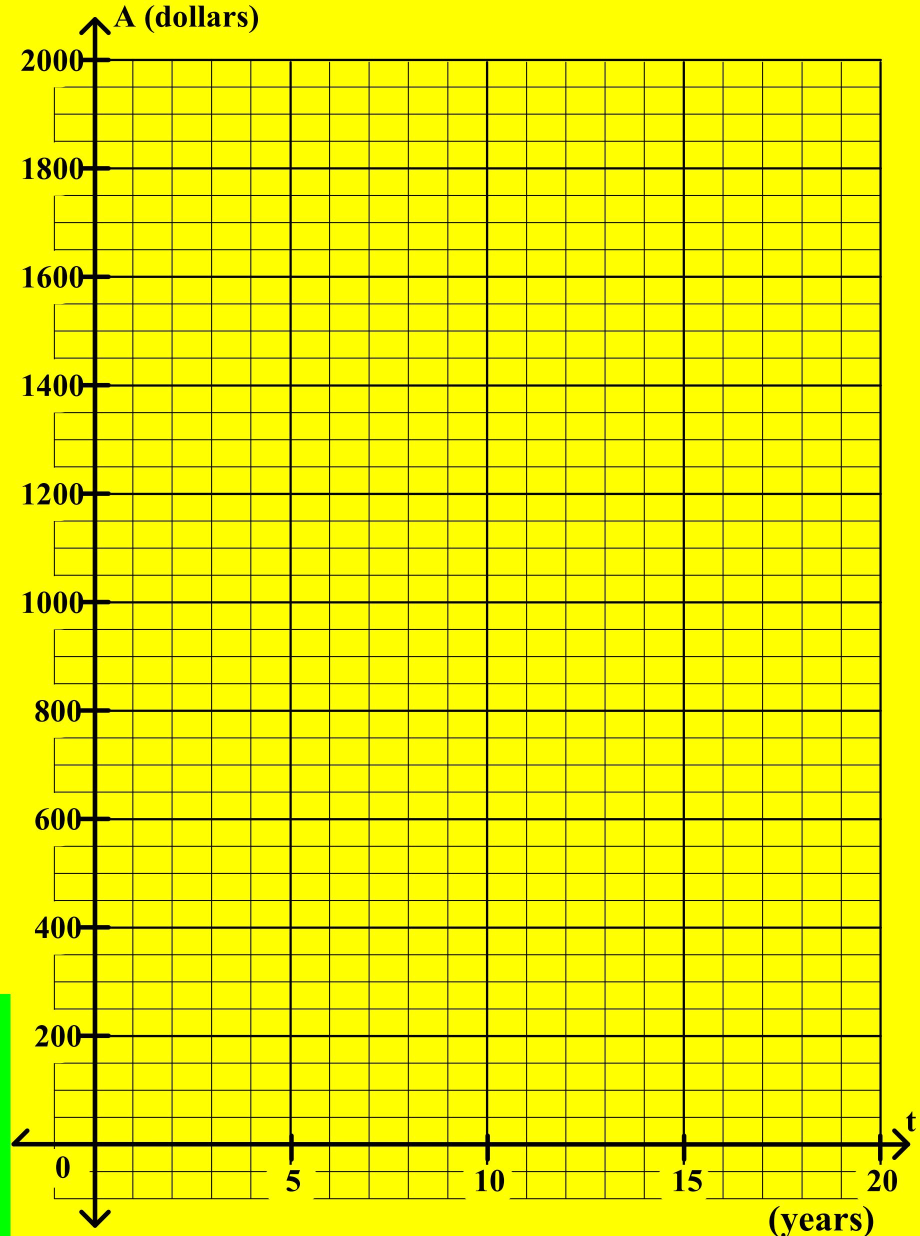

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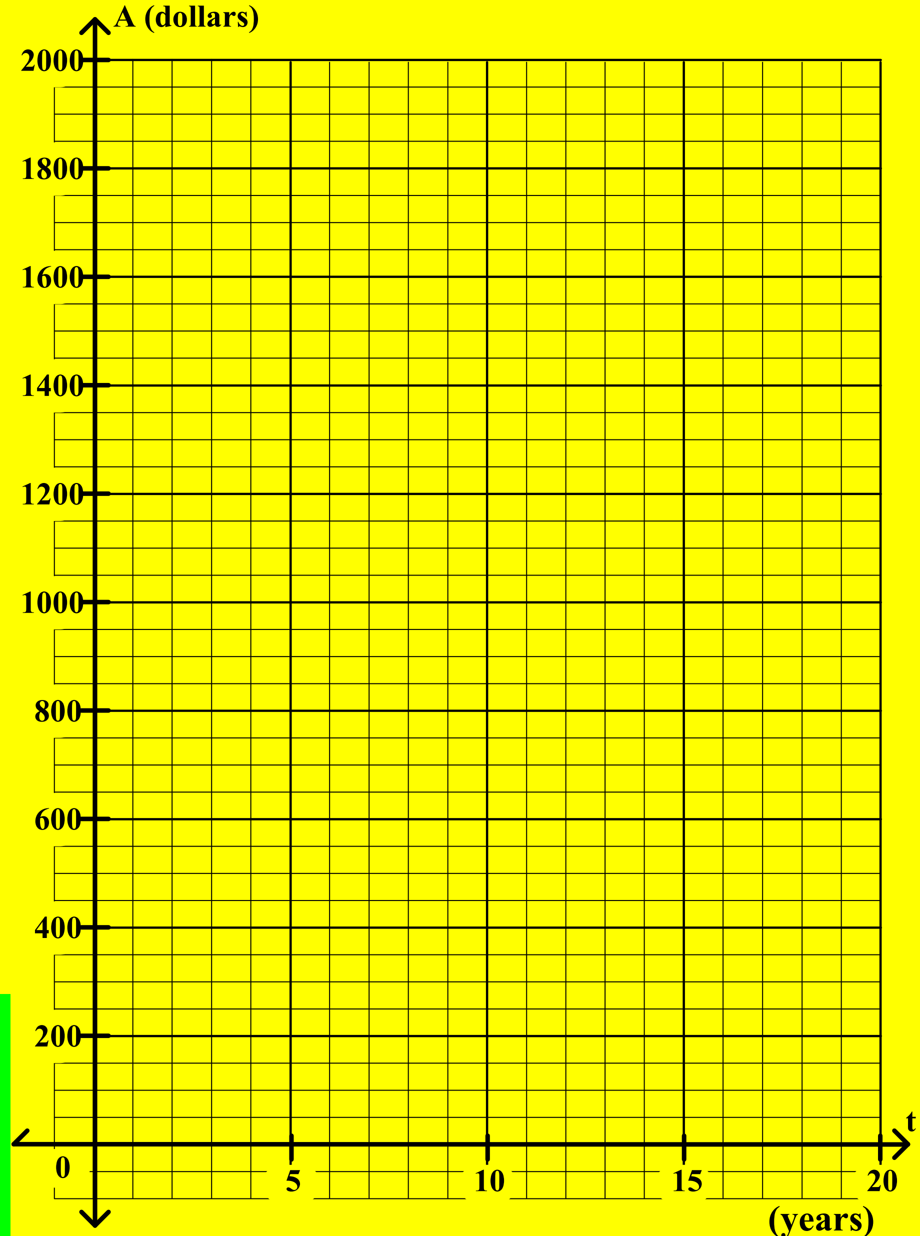
Use the function to fill out a table of values.



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P = 600 (dollars)

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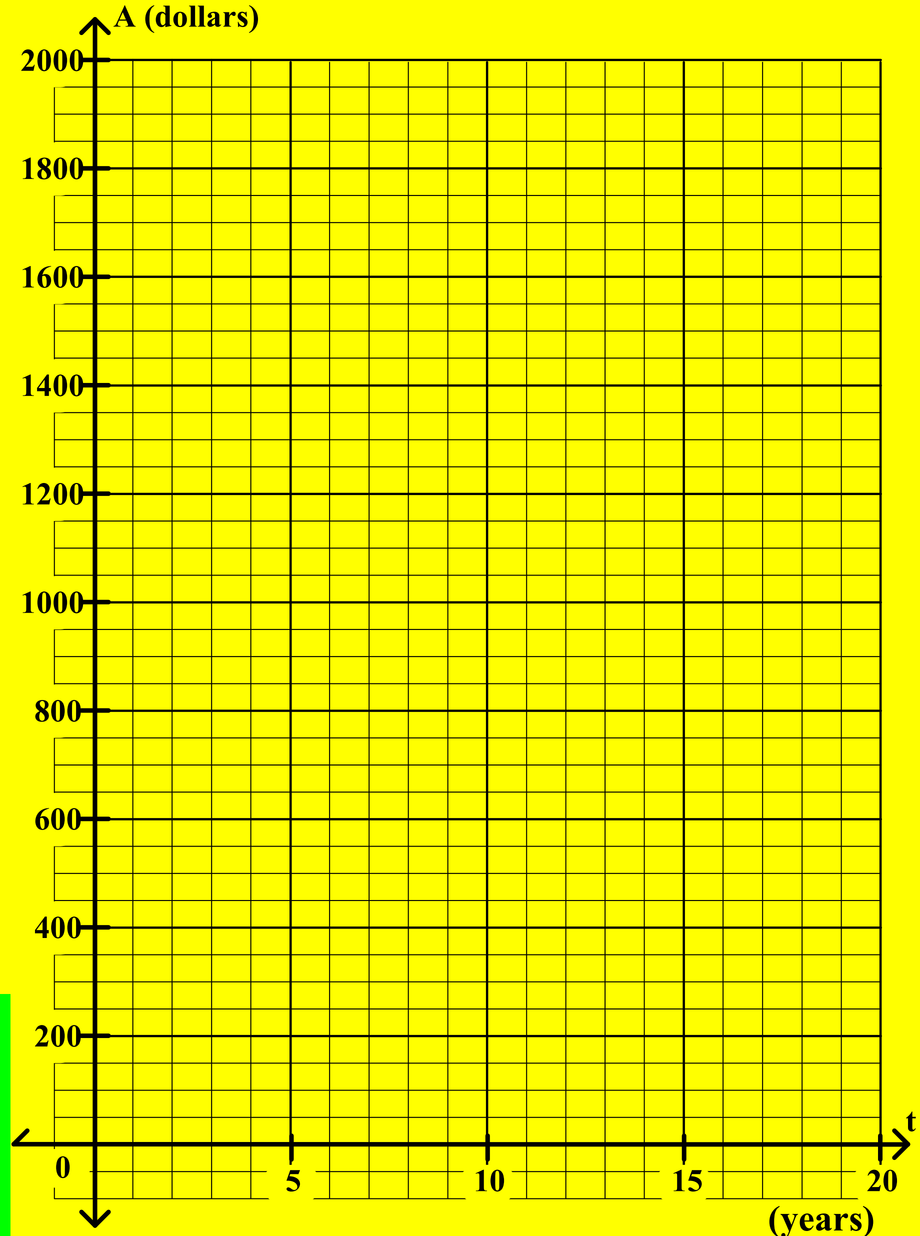
$$A = 600e^{0.06t}$$

t	A

Use the function to fill out a table of values.



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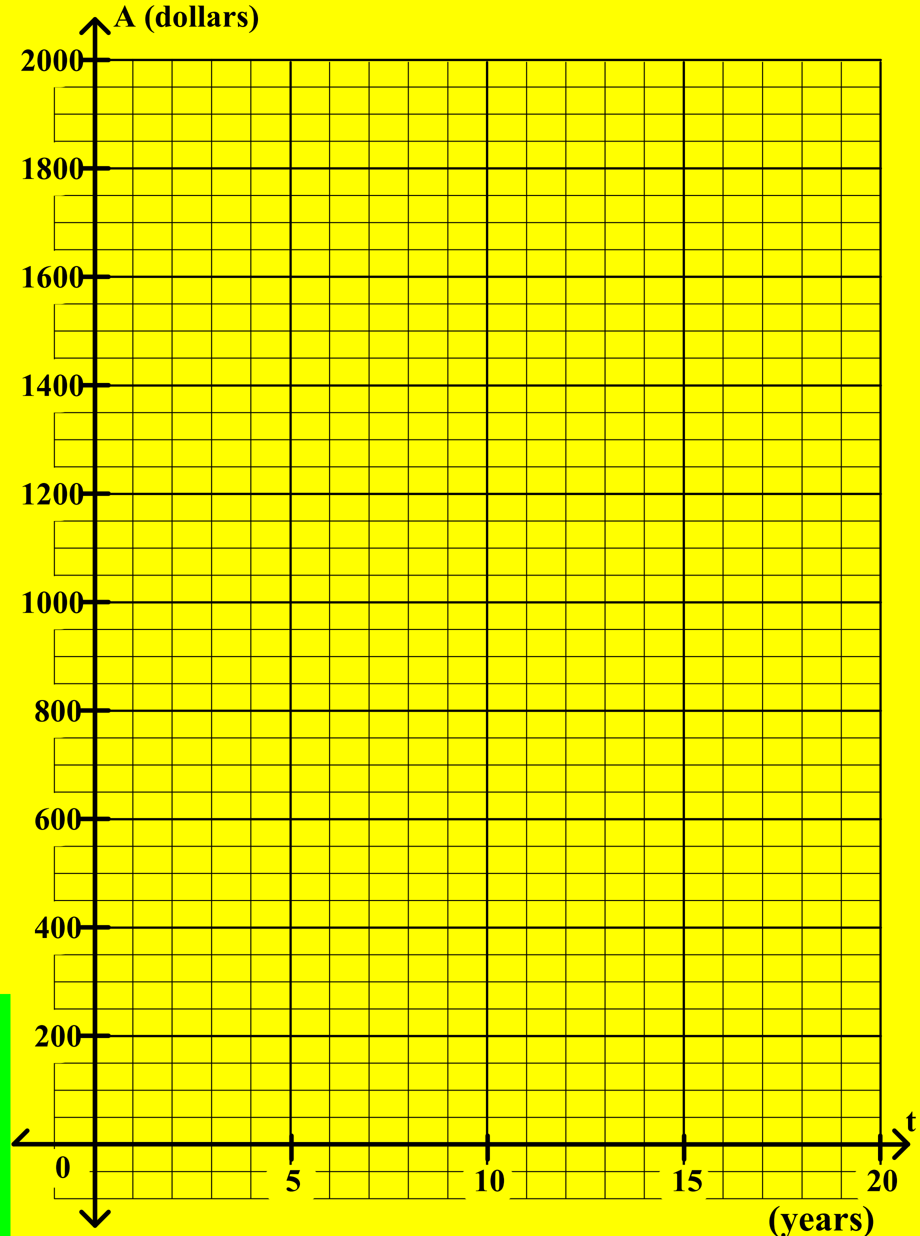
P = 600 (dollars)

R = 0.06

$$A = 600e^{0.06t}$$

t	A
0	

Use the function to fill out a table of values.



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R = 0.06

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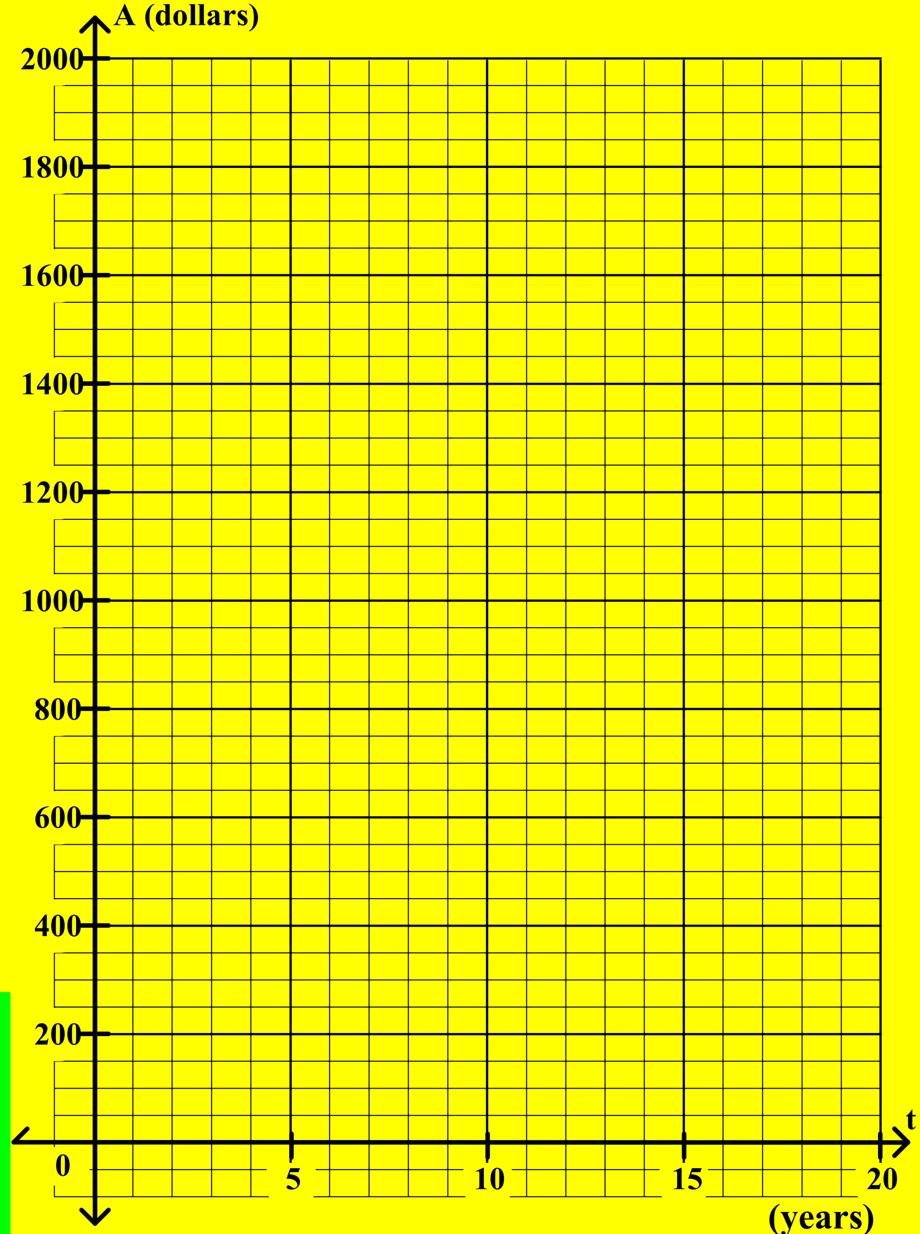
t	A
0	600

Use the function to fill out a table of values.



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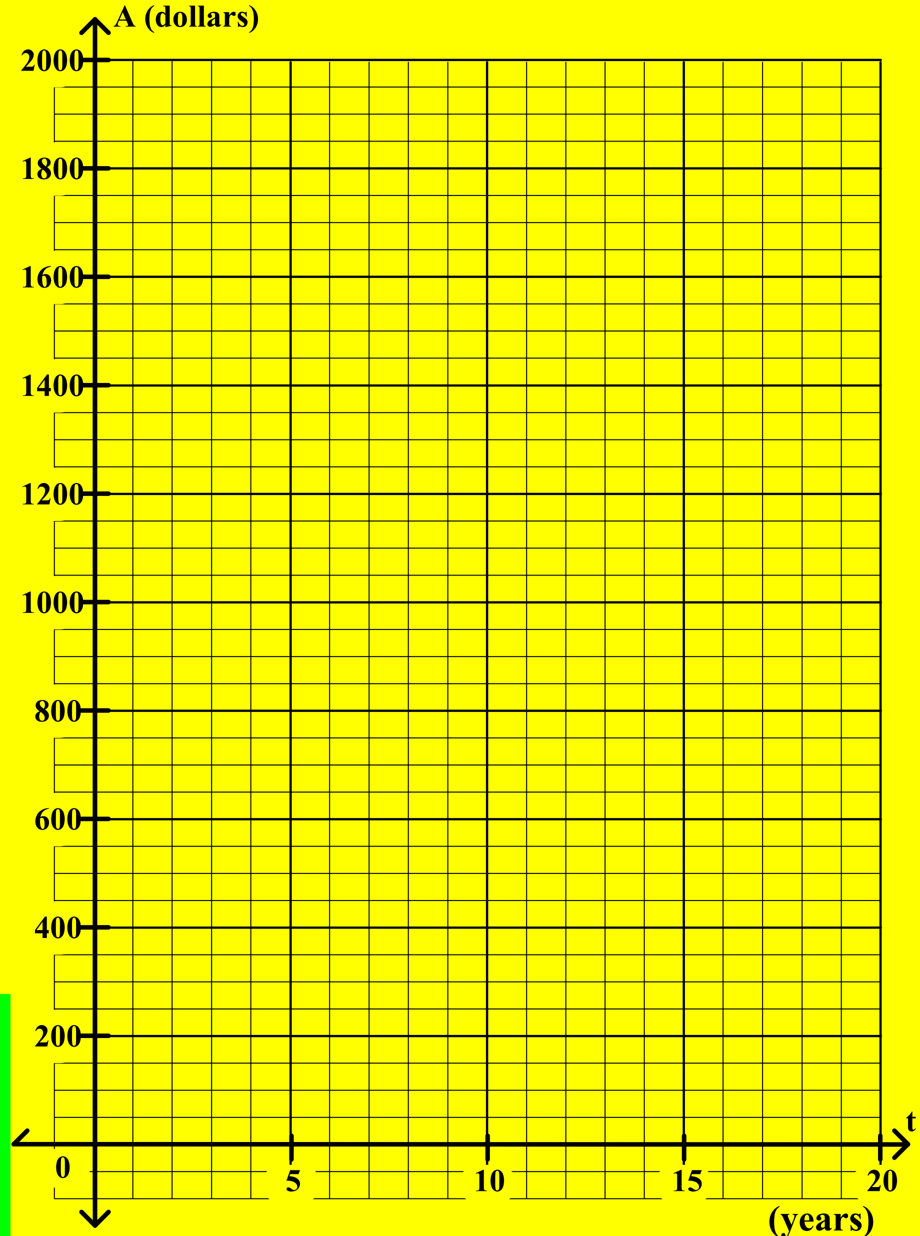
t	A
0	600
5	

Use the function to fill out a table of values.



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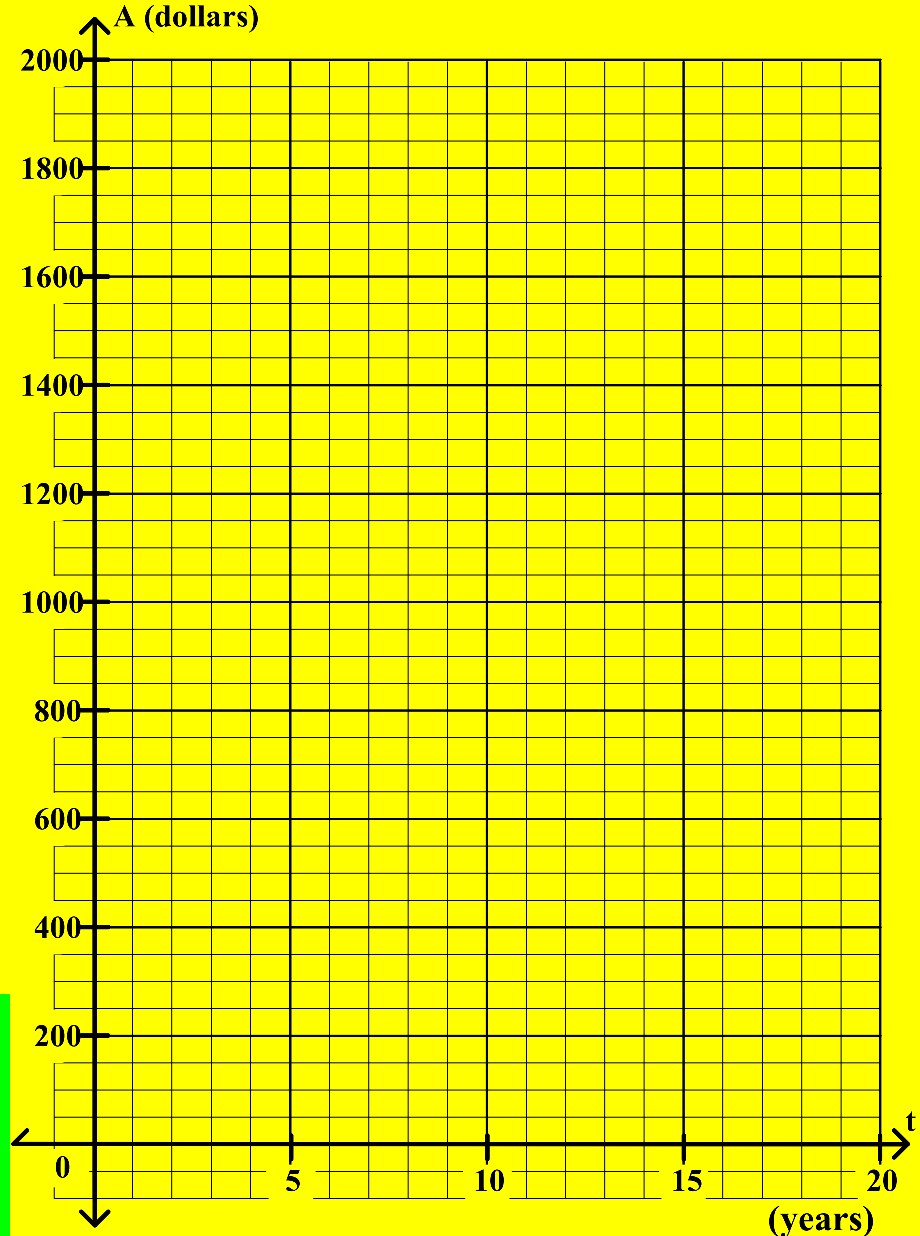
$P = 600$ (dollars)

$R = 0.06$

$$A = 600e^{0.06t}$$

t	A
0	600
5	810



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R = 0.06

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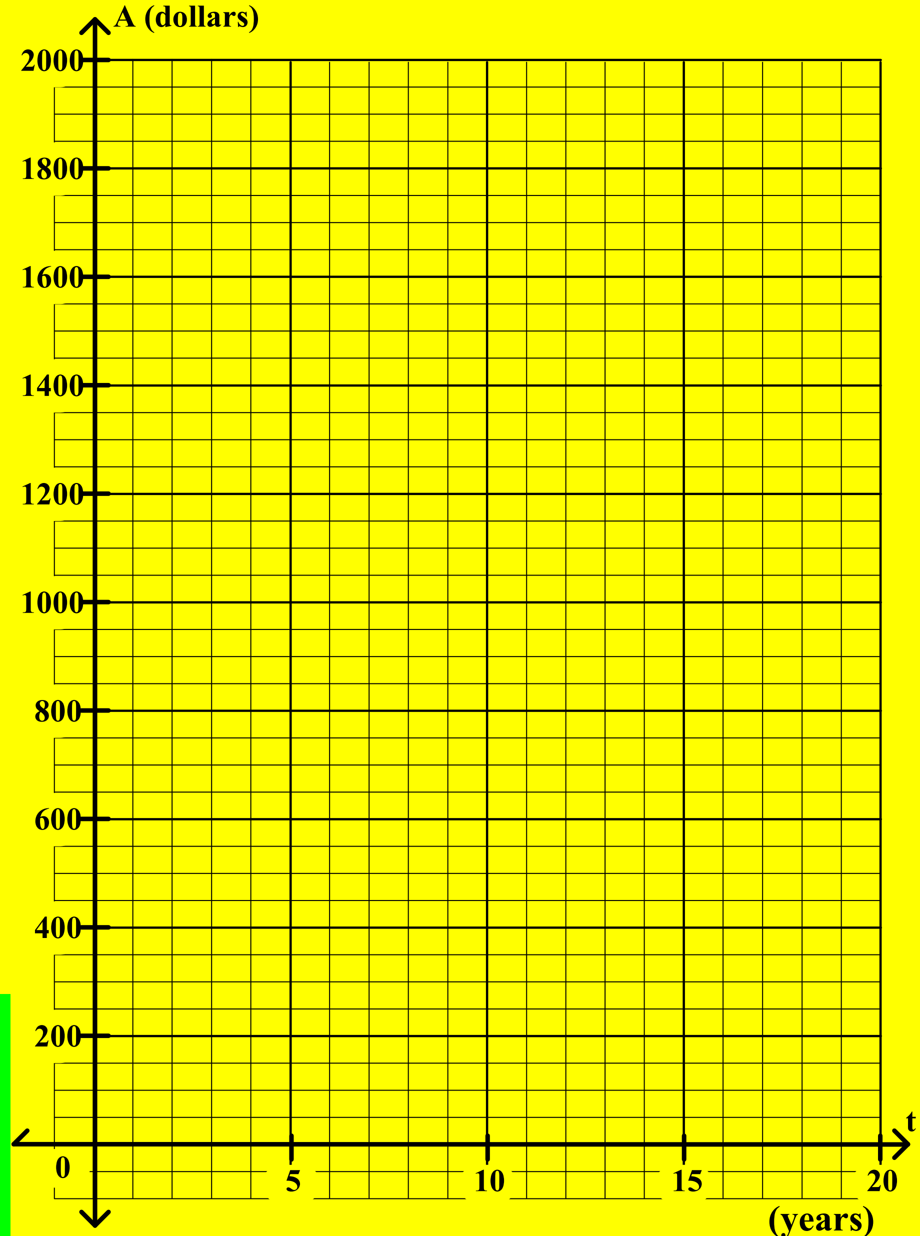
t	A
0	600
5	810
10	



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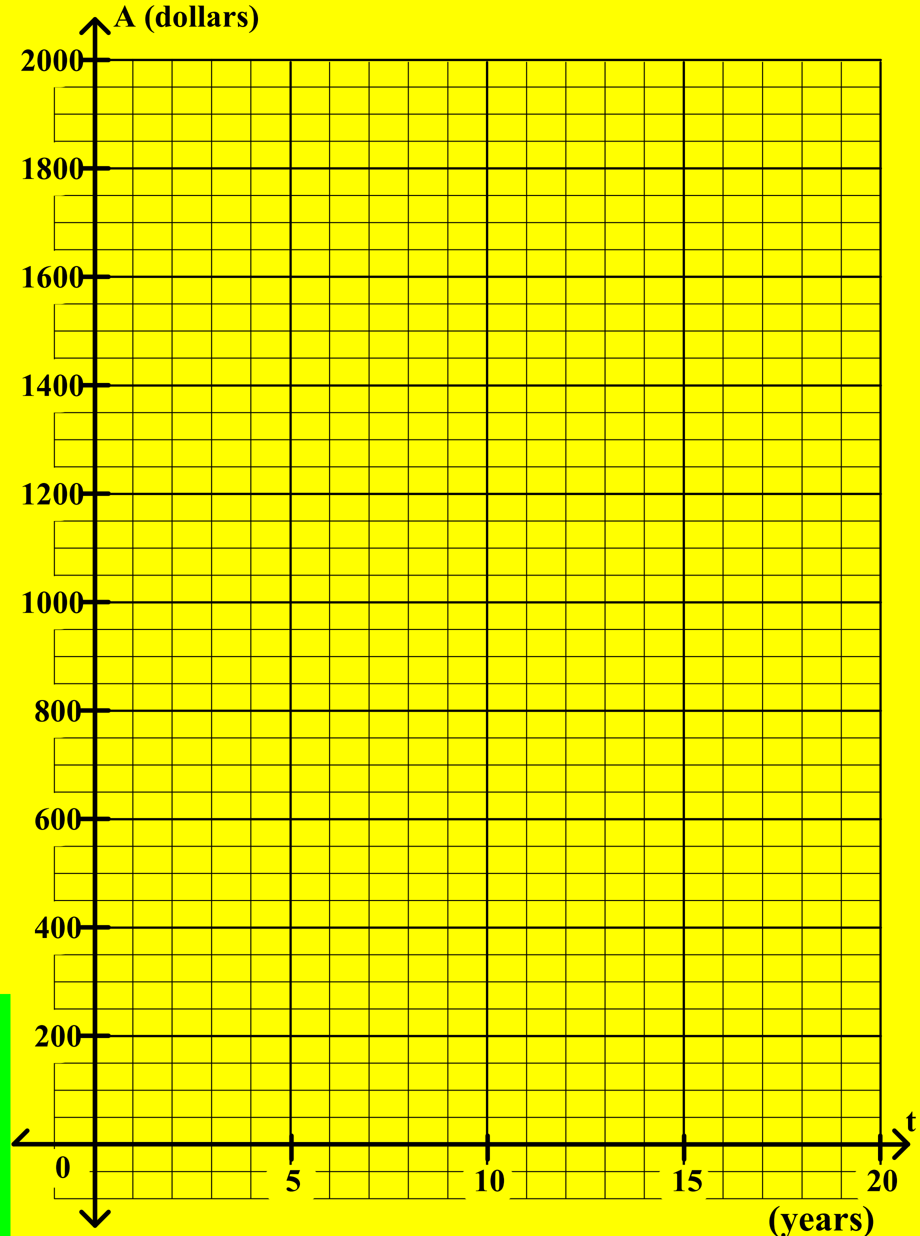
t	A
0	600
5	810
10	1093

Use the function to fill out a table of values.



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P = 600 (dollars)

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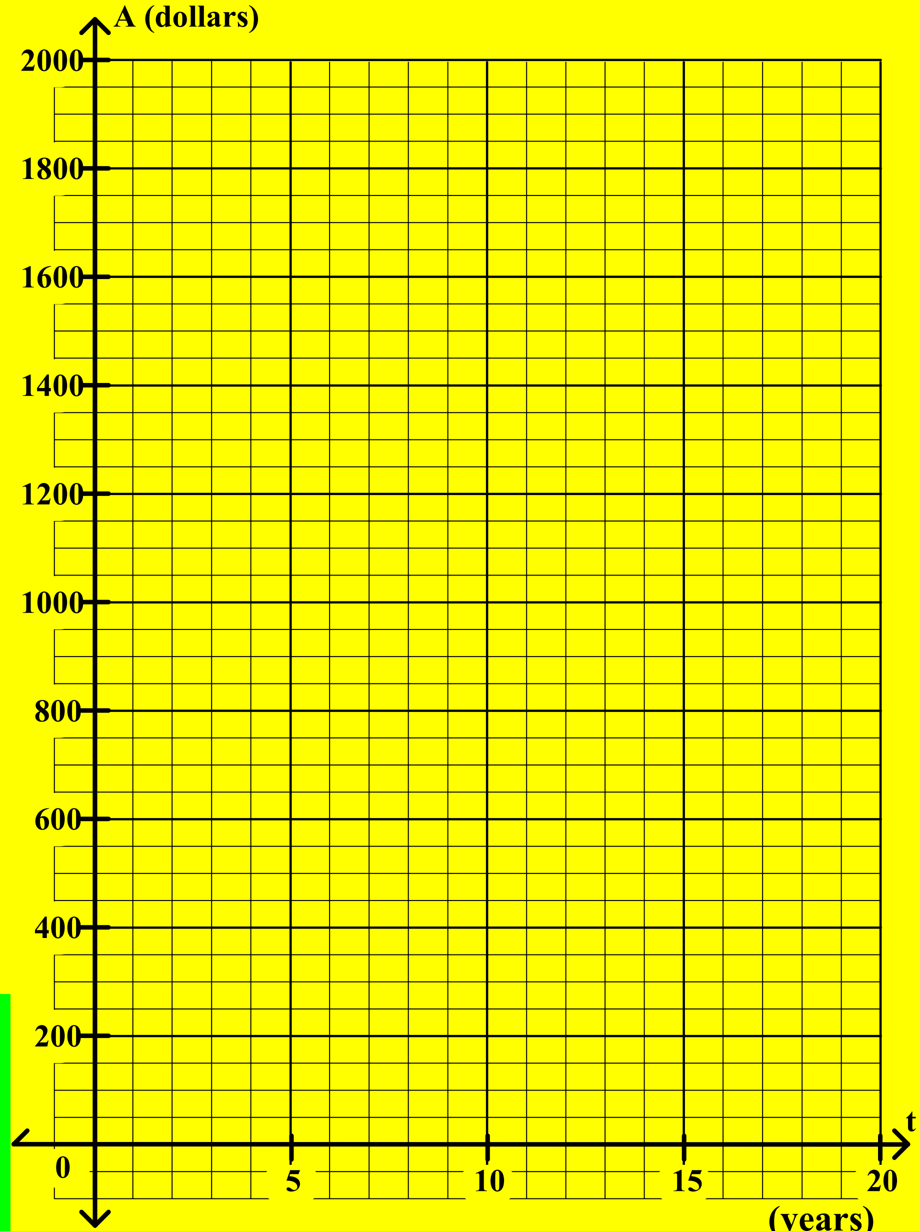
$$A = 600e^{0.06t}$$

t	A
0	600
5	810
10	1093
15	

Use the function to fill out a table of values.



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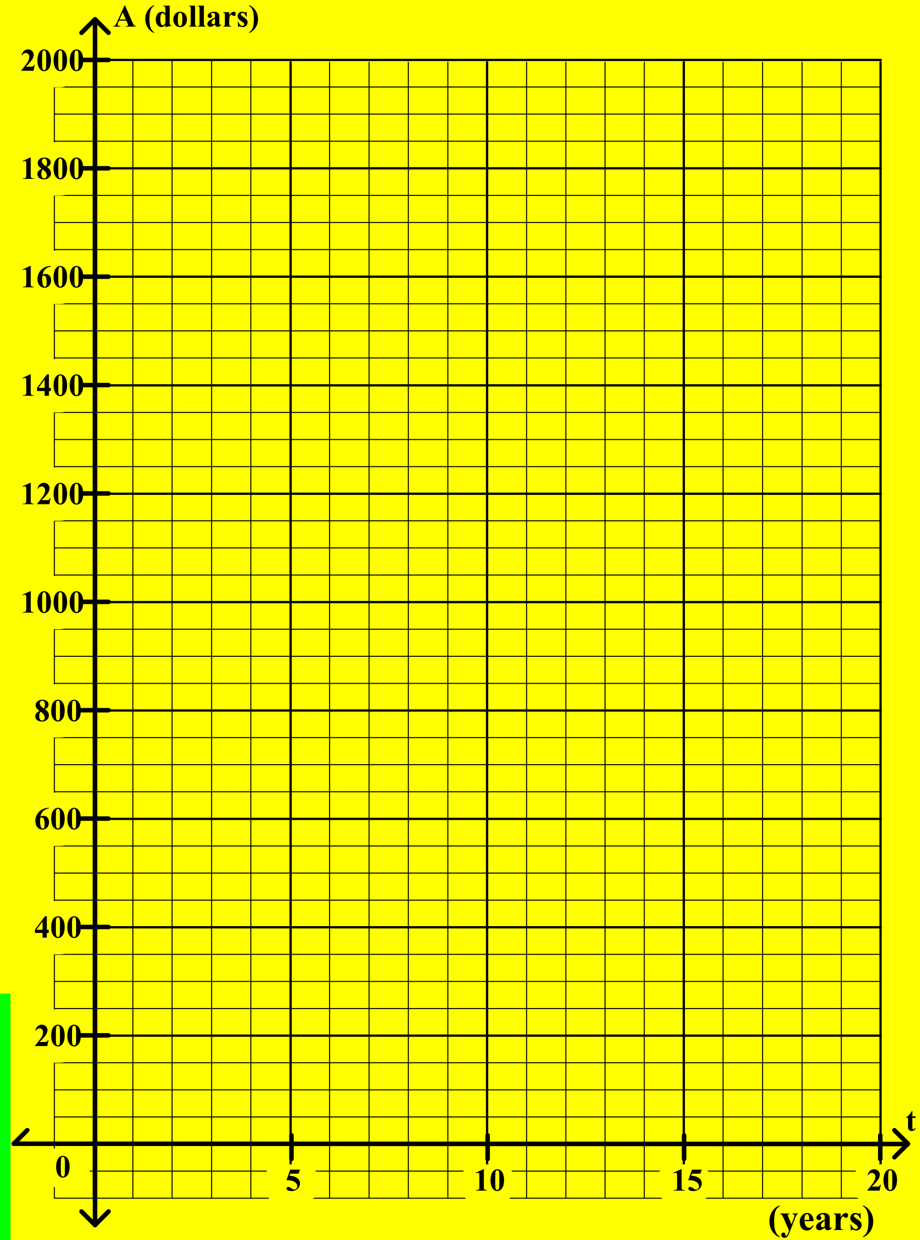
t	A
0	600
5	810
10	1093
15	1476



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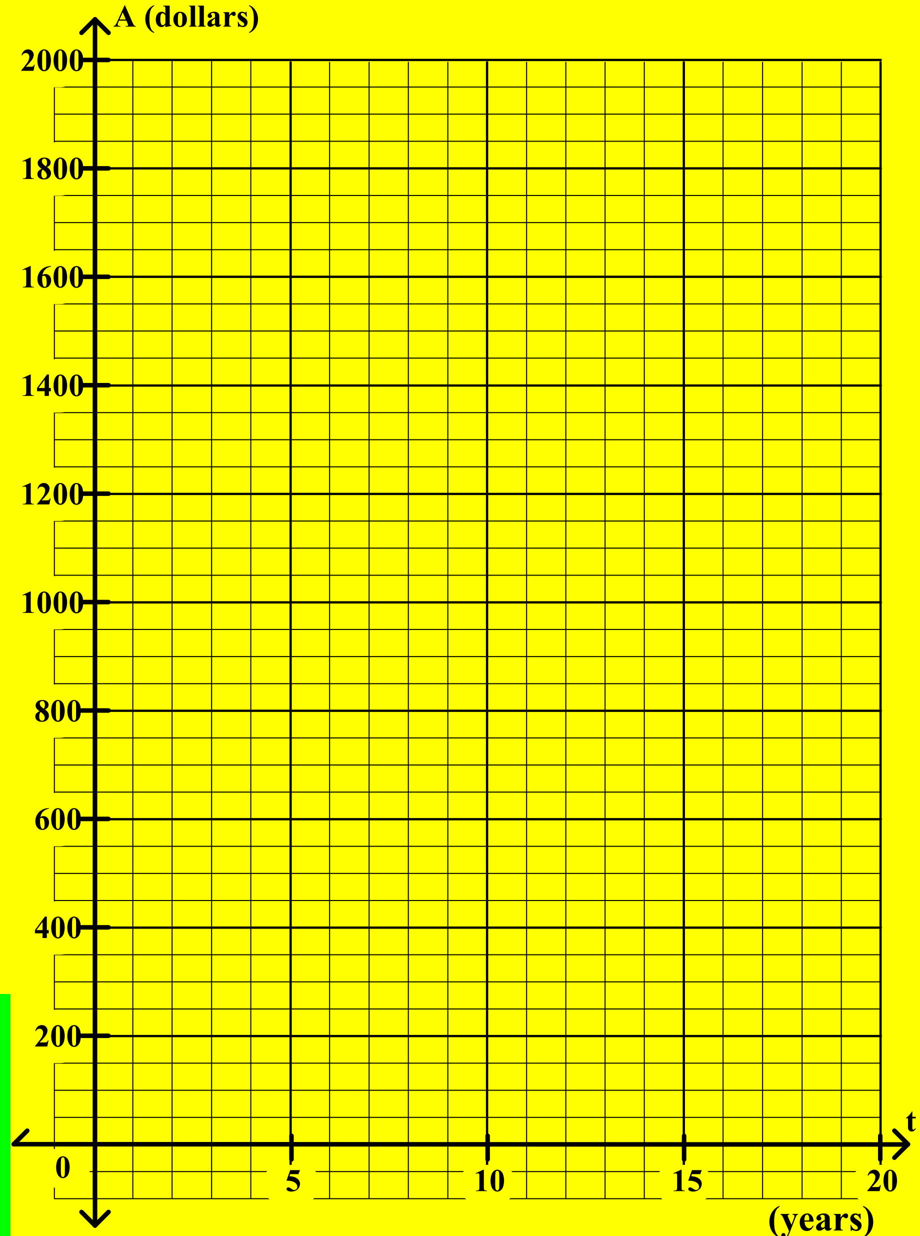
t	A
0	600
5	810
10	1093
15	1476
20	



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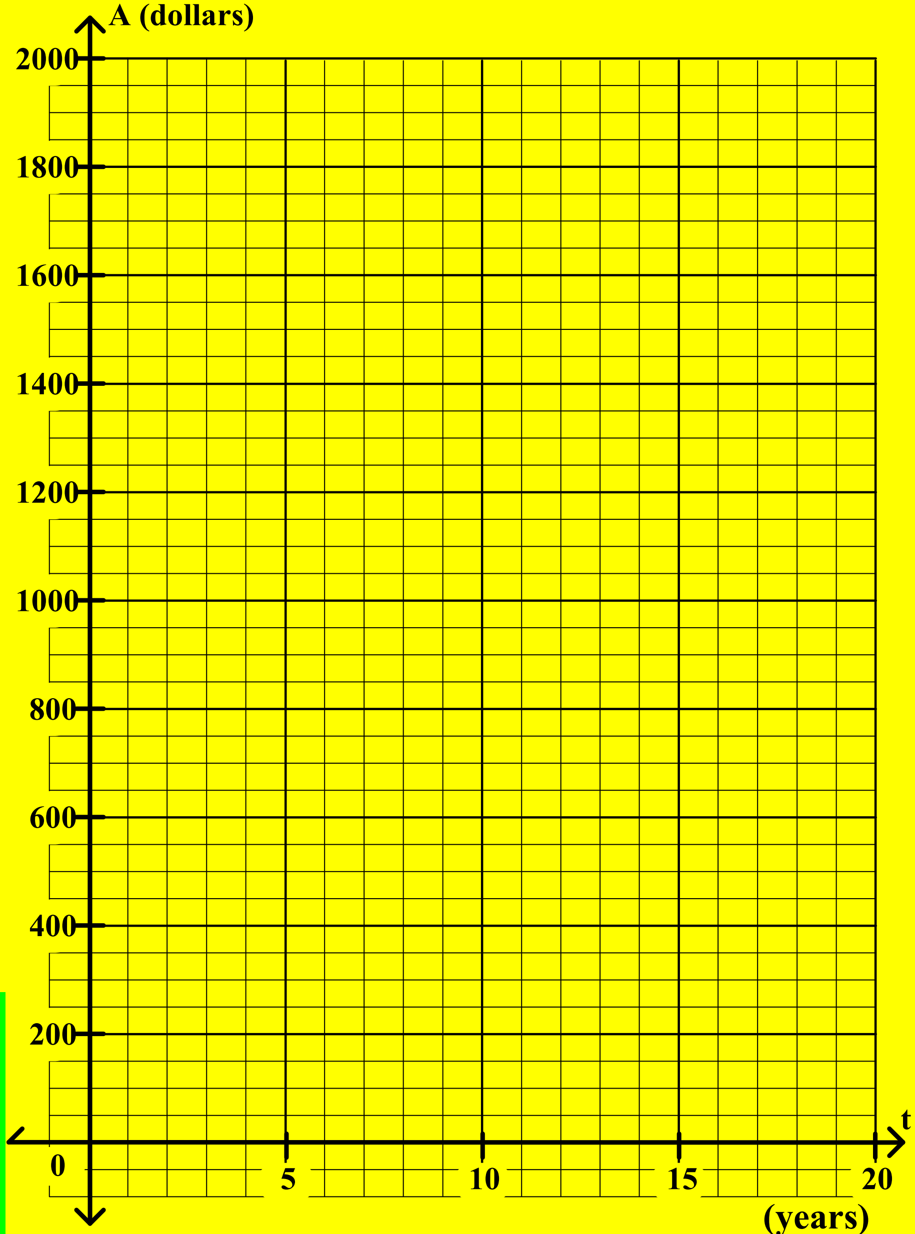
t	A
0	600
5	810
10	1093
15	1476
20	1992

Use the function to fill out a table of values.



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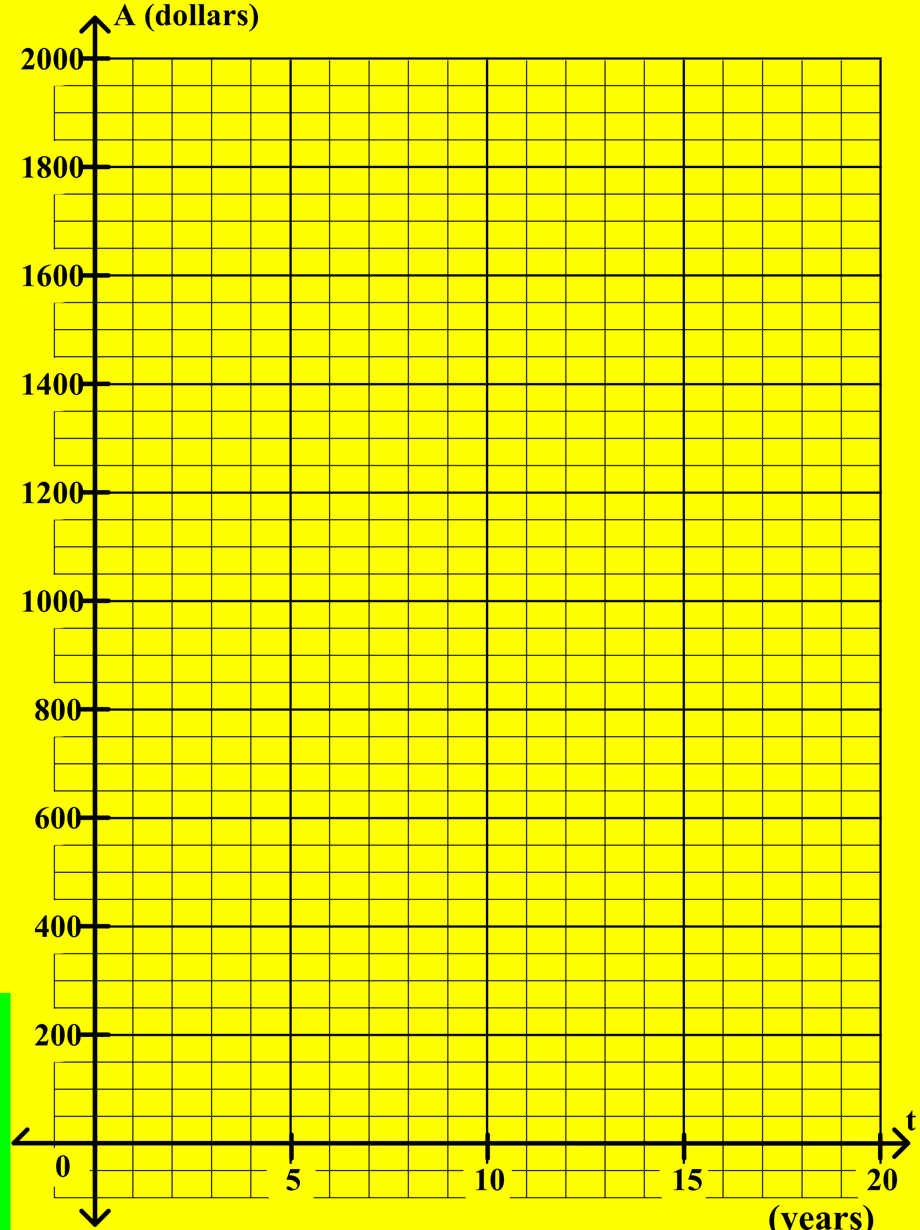
t	A
0	600
5	810
10	1093
15	1476
20	1992

Use the function to fill out a table of values. Plot the points.



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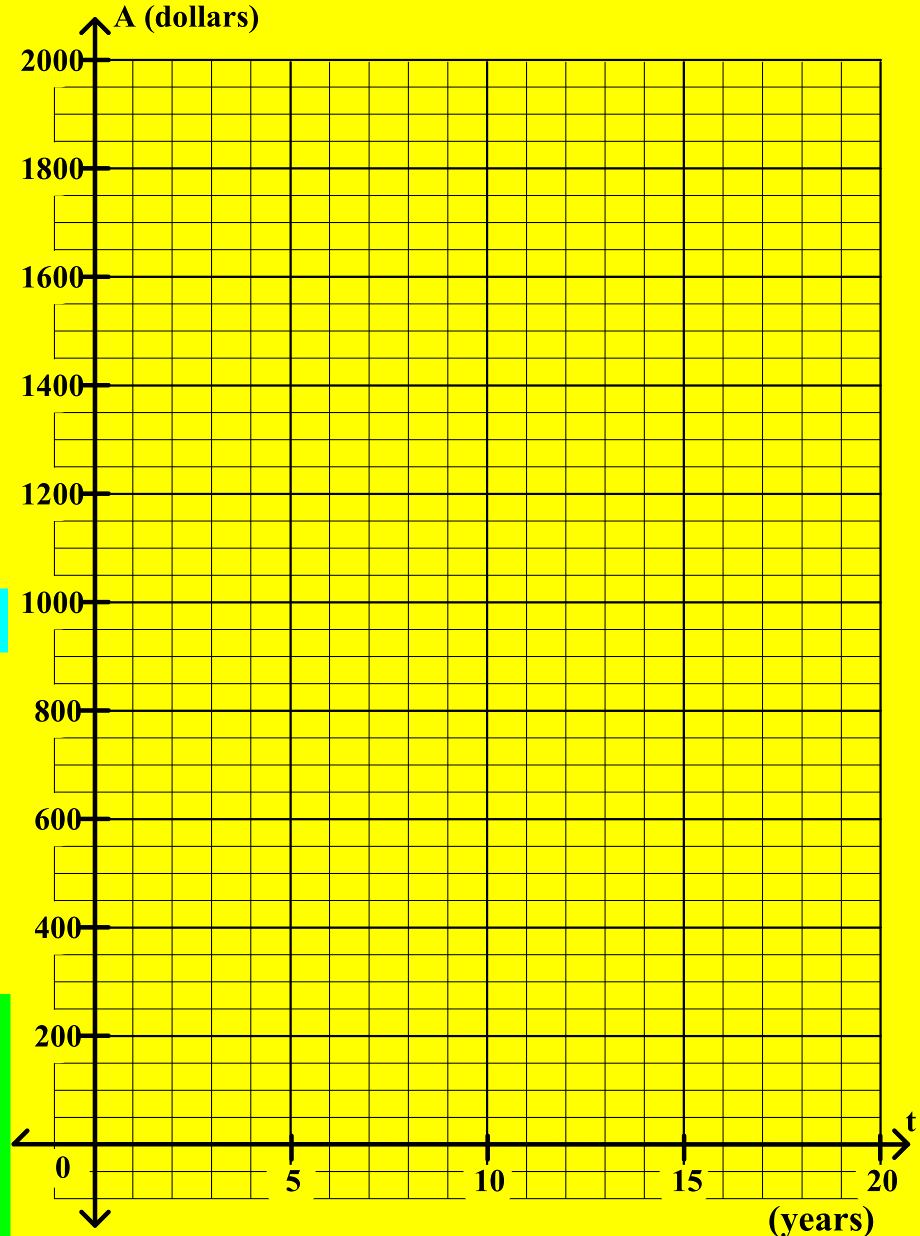

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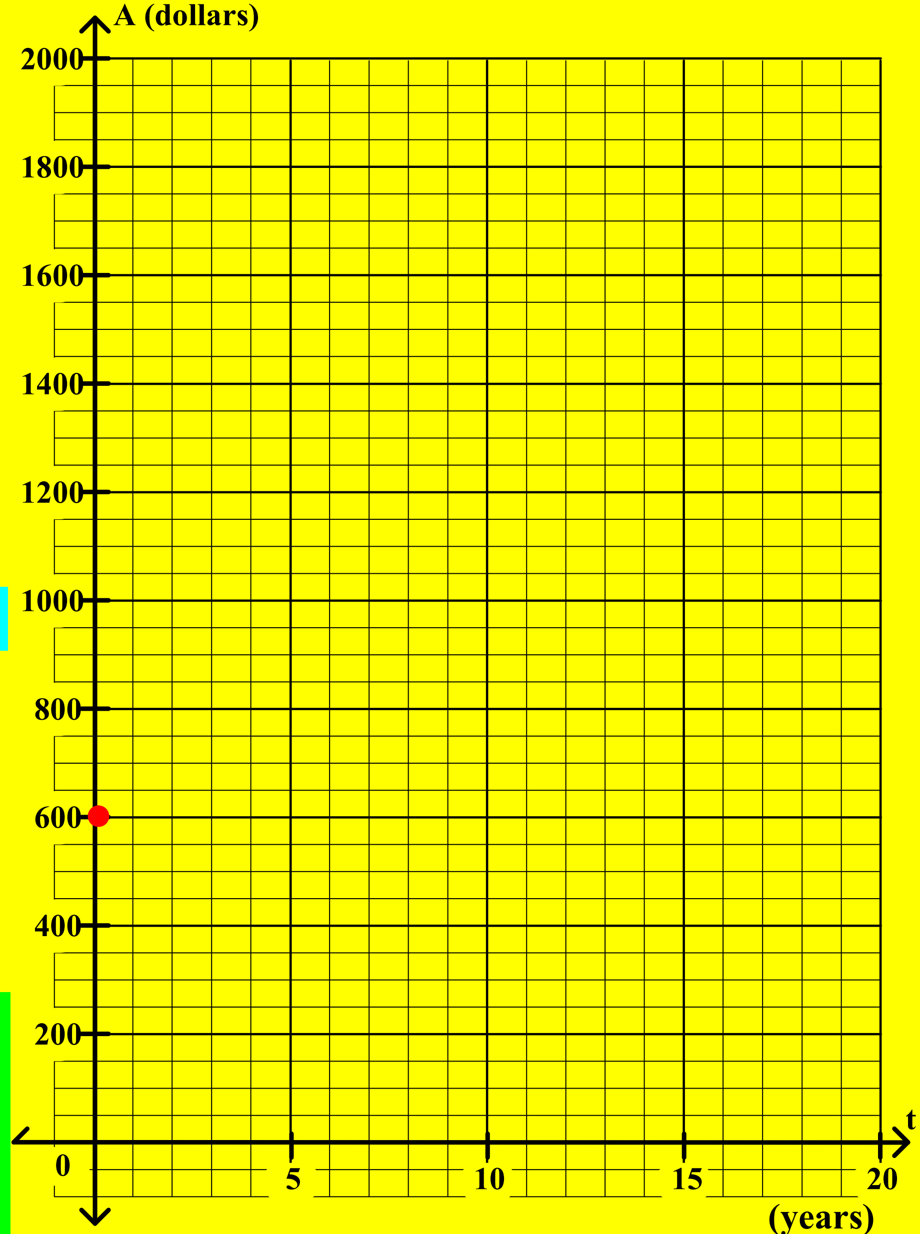

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Algebra II Class Worksheet #4 Unit 10

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R = 0.06

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t	A
0	600
5	810
10	1093
15	1476
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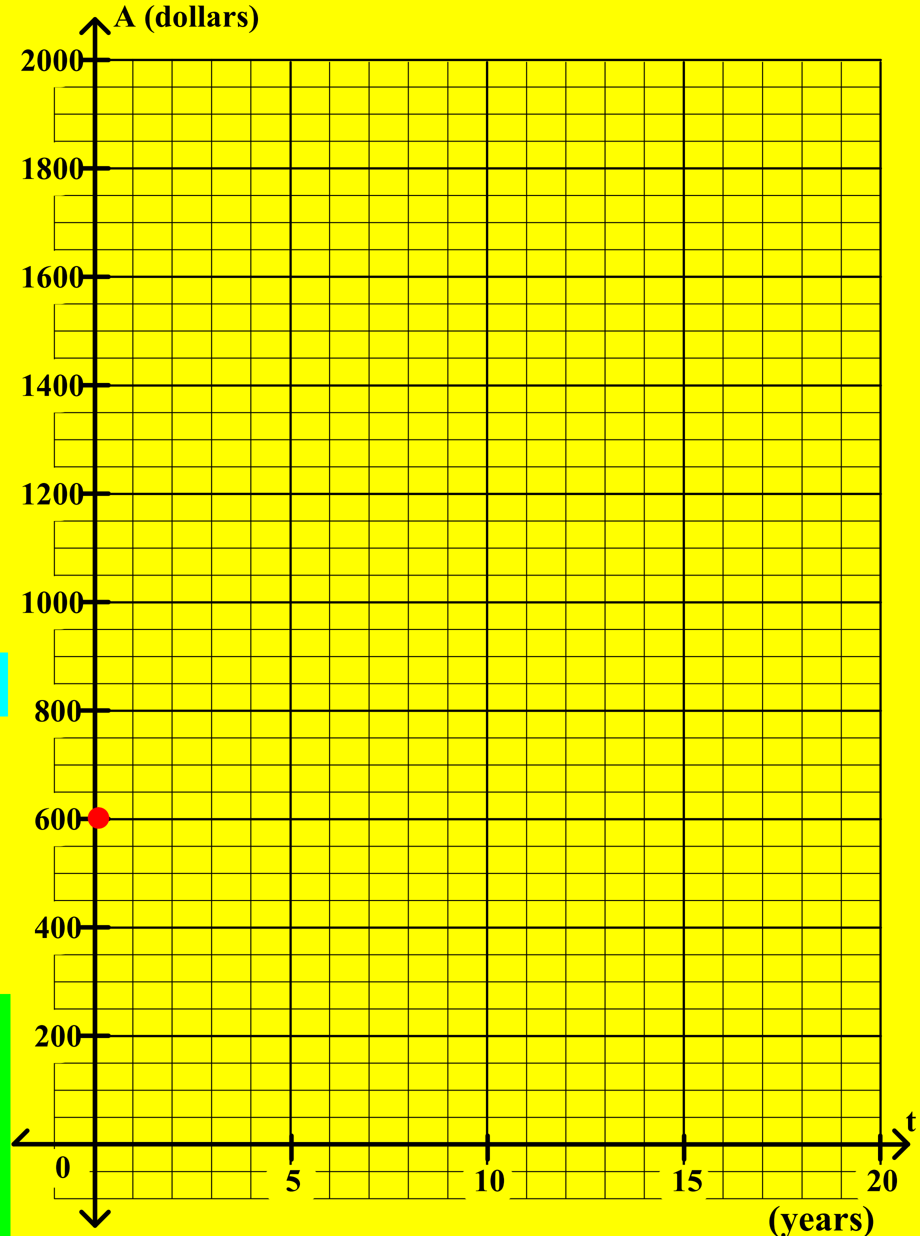

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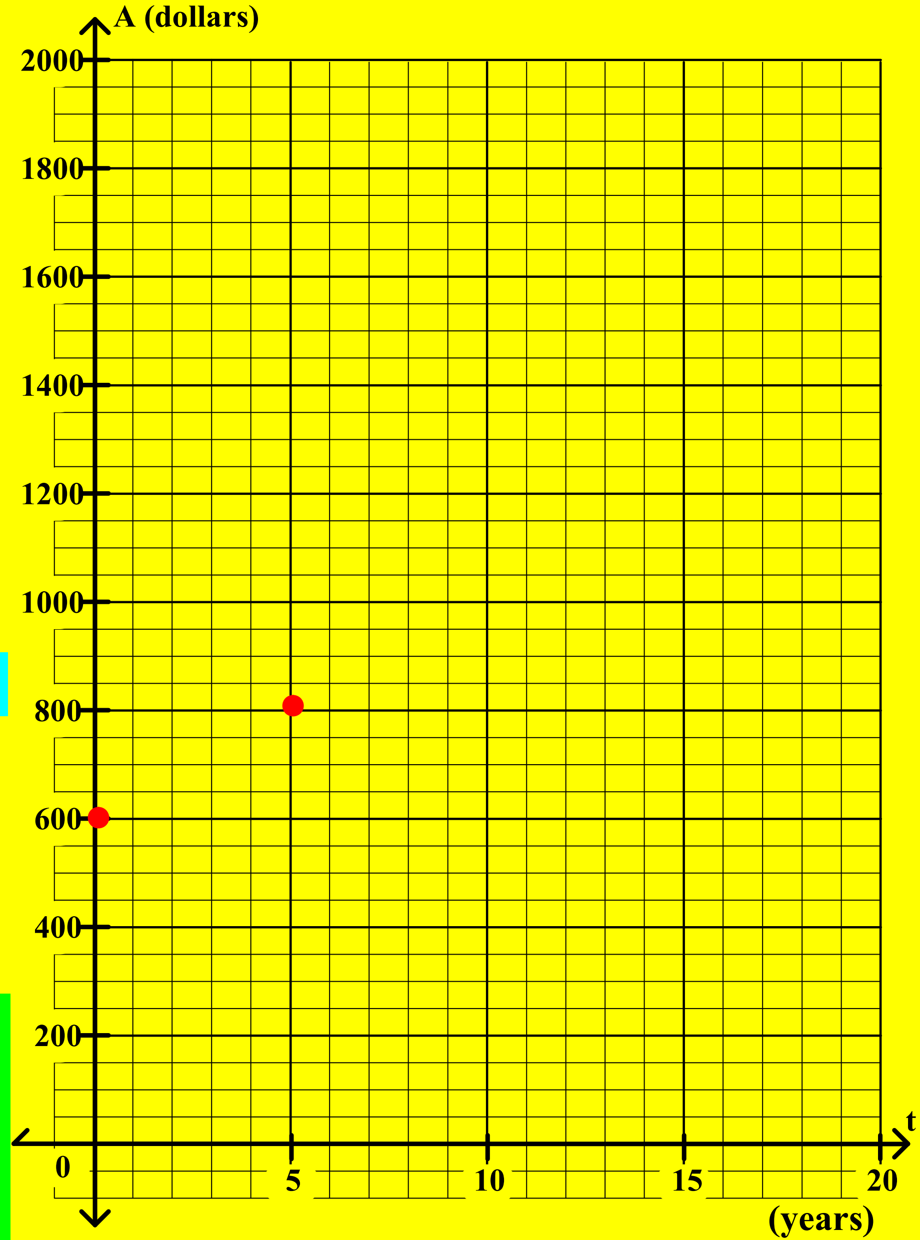

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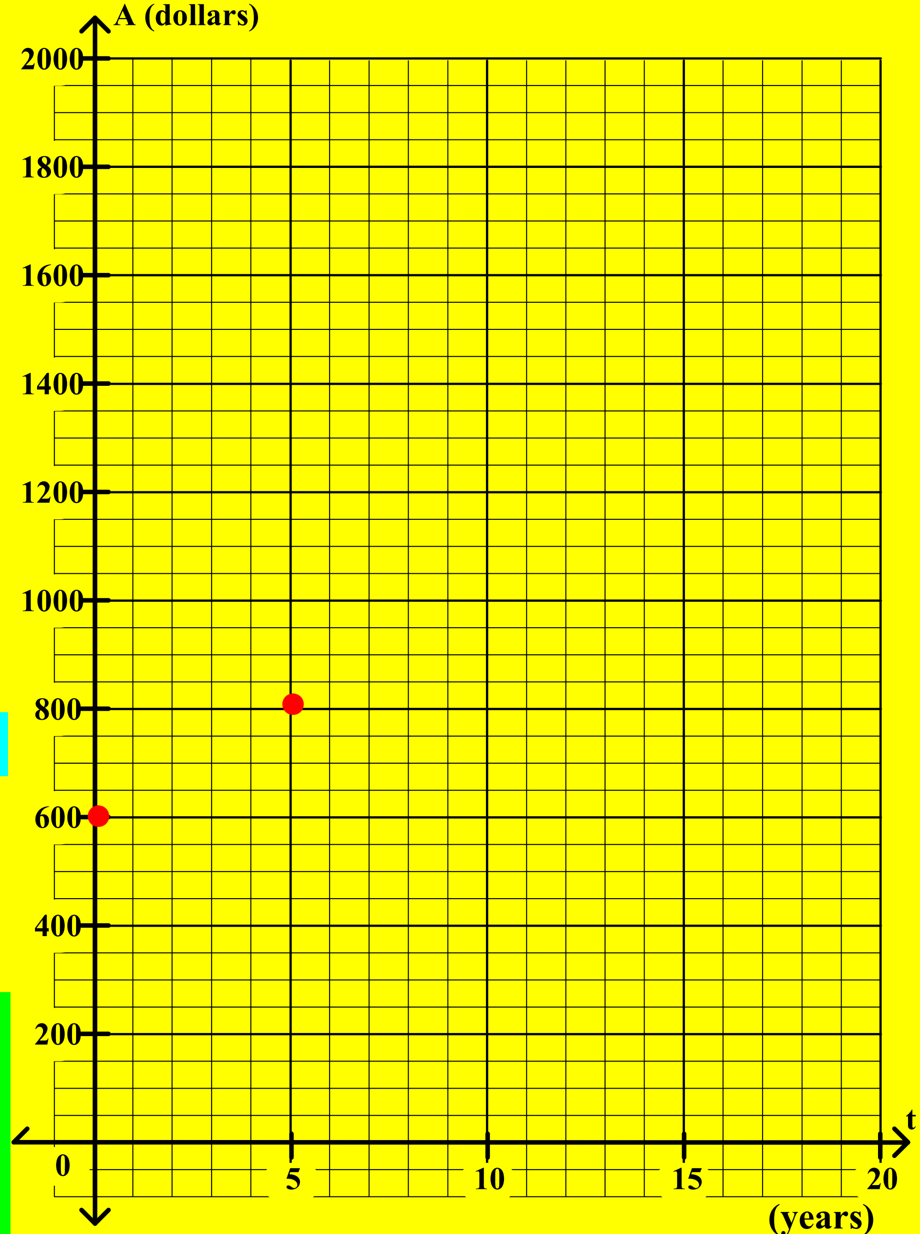

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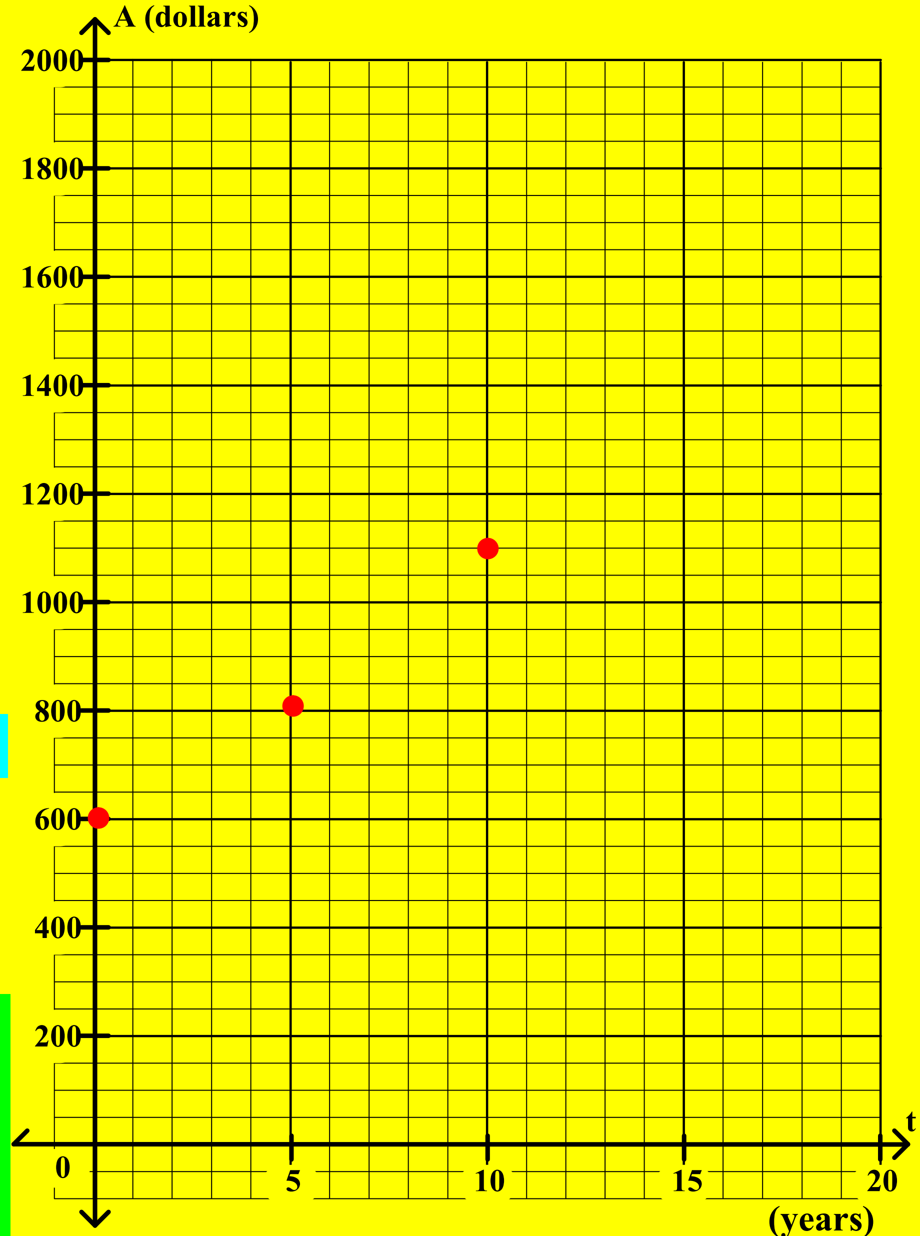

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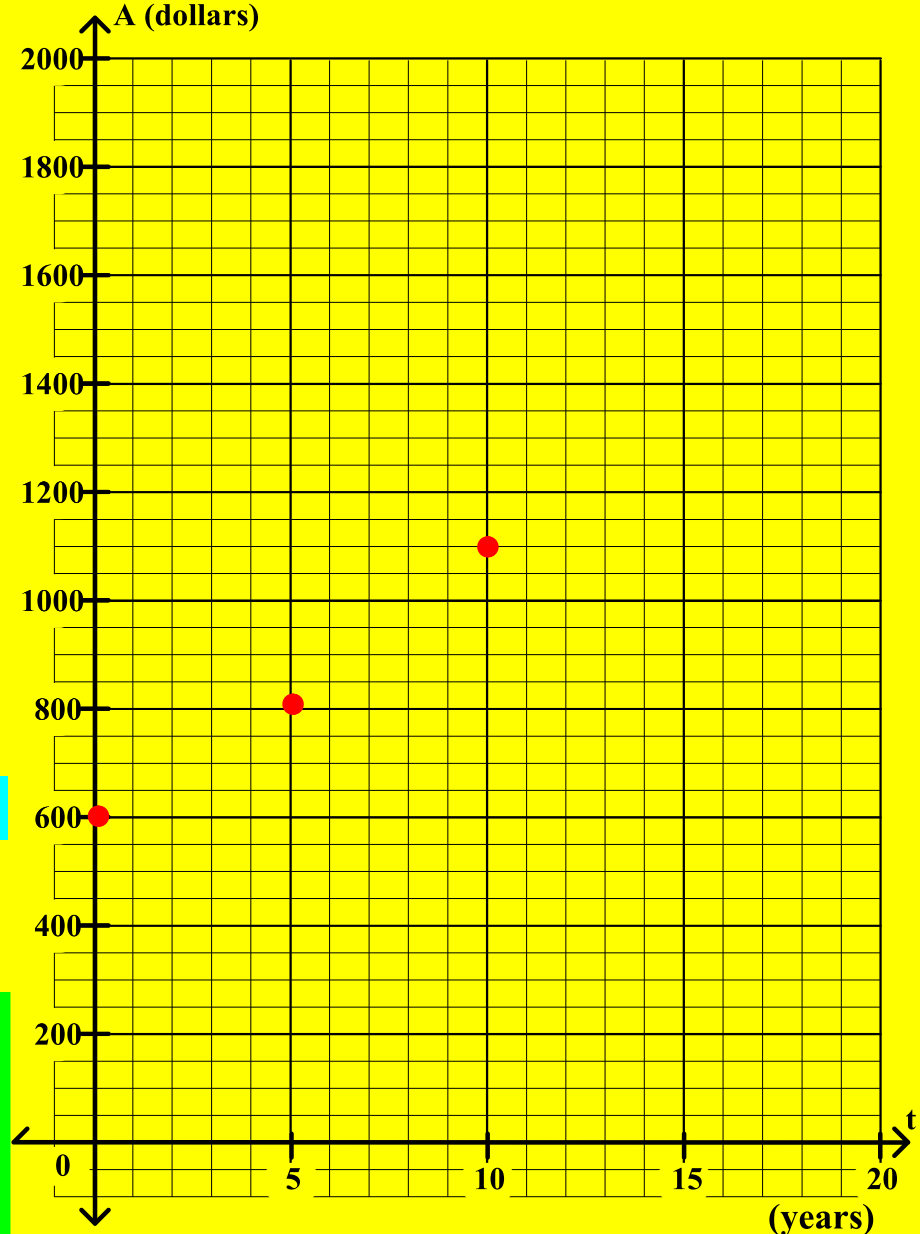

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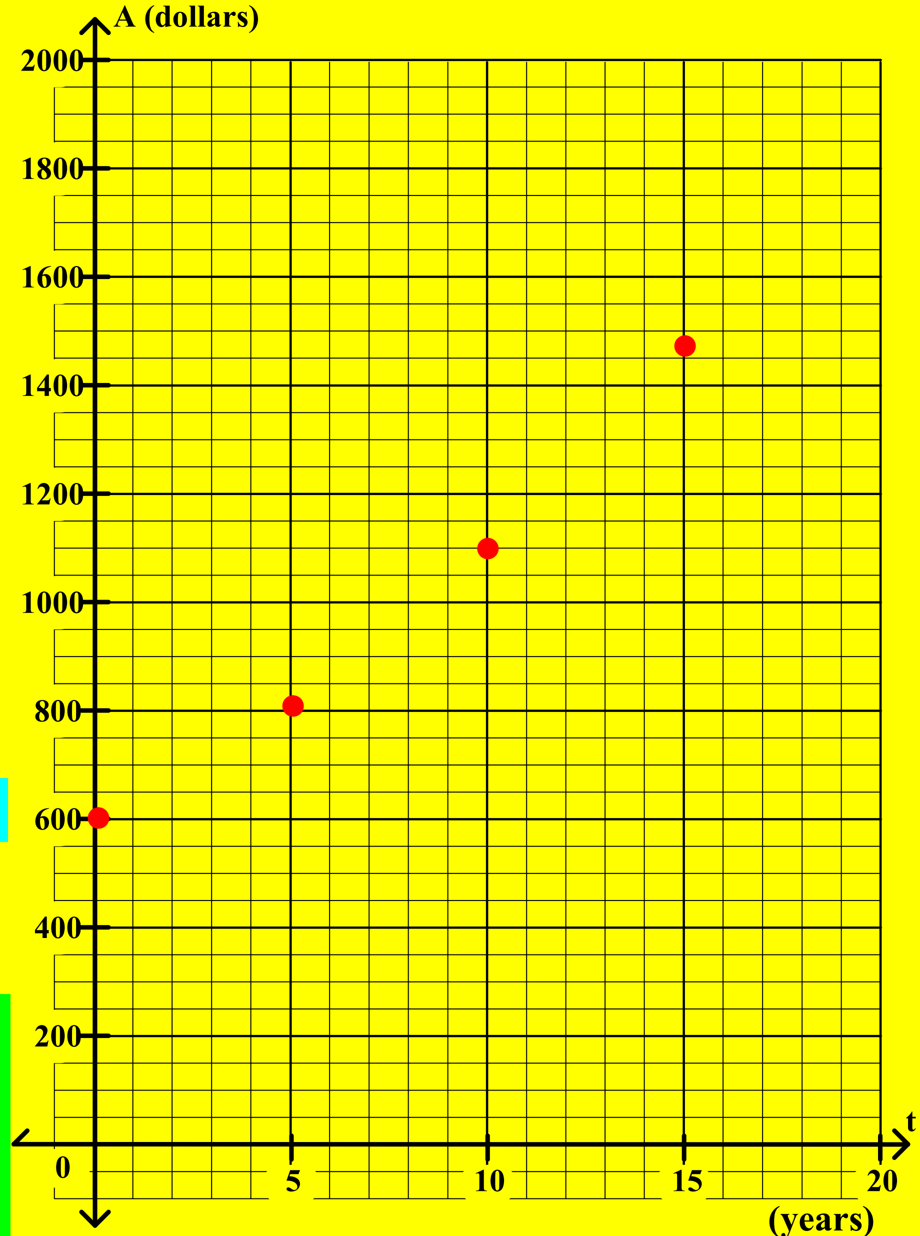

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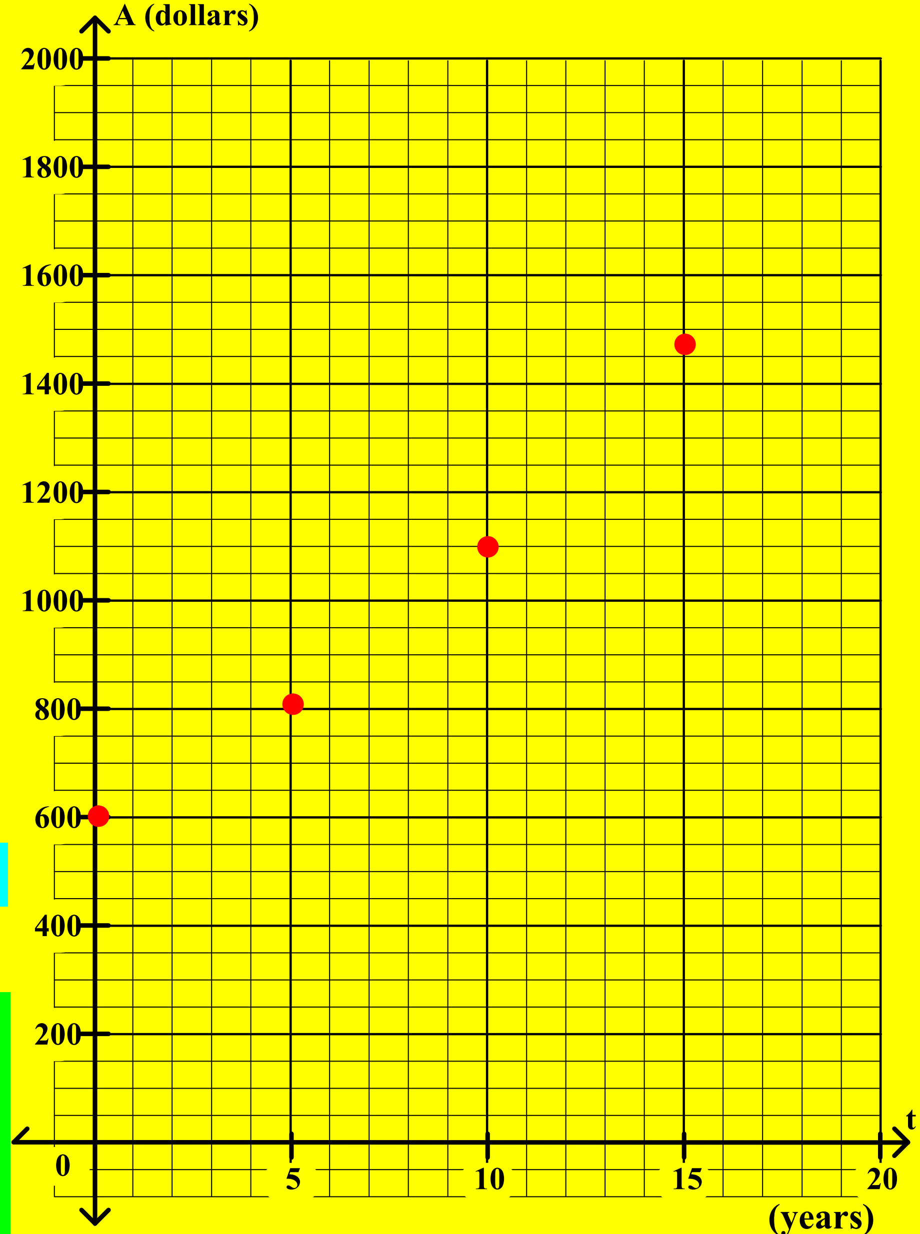

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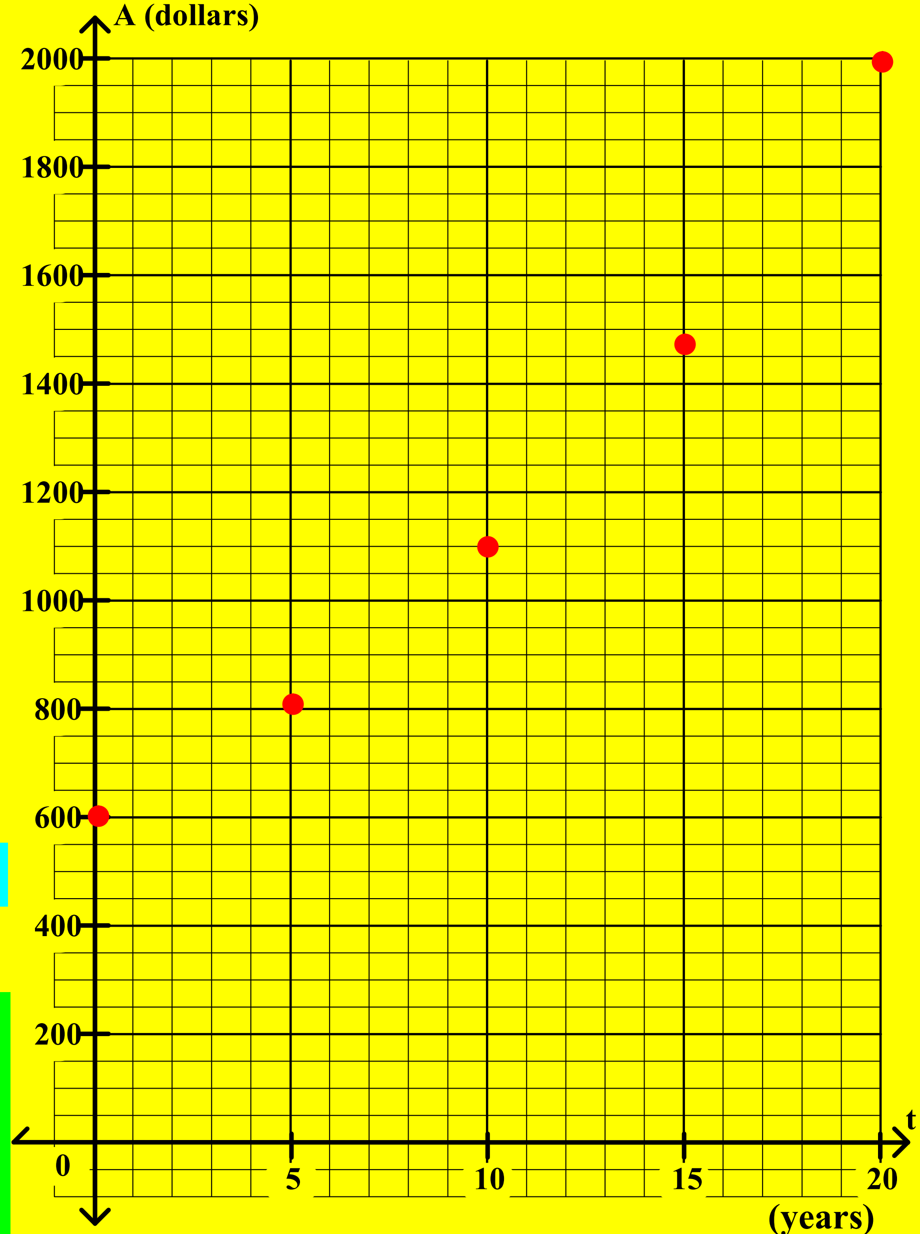

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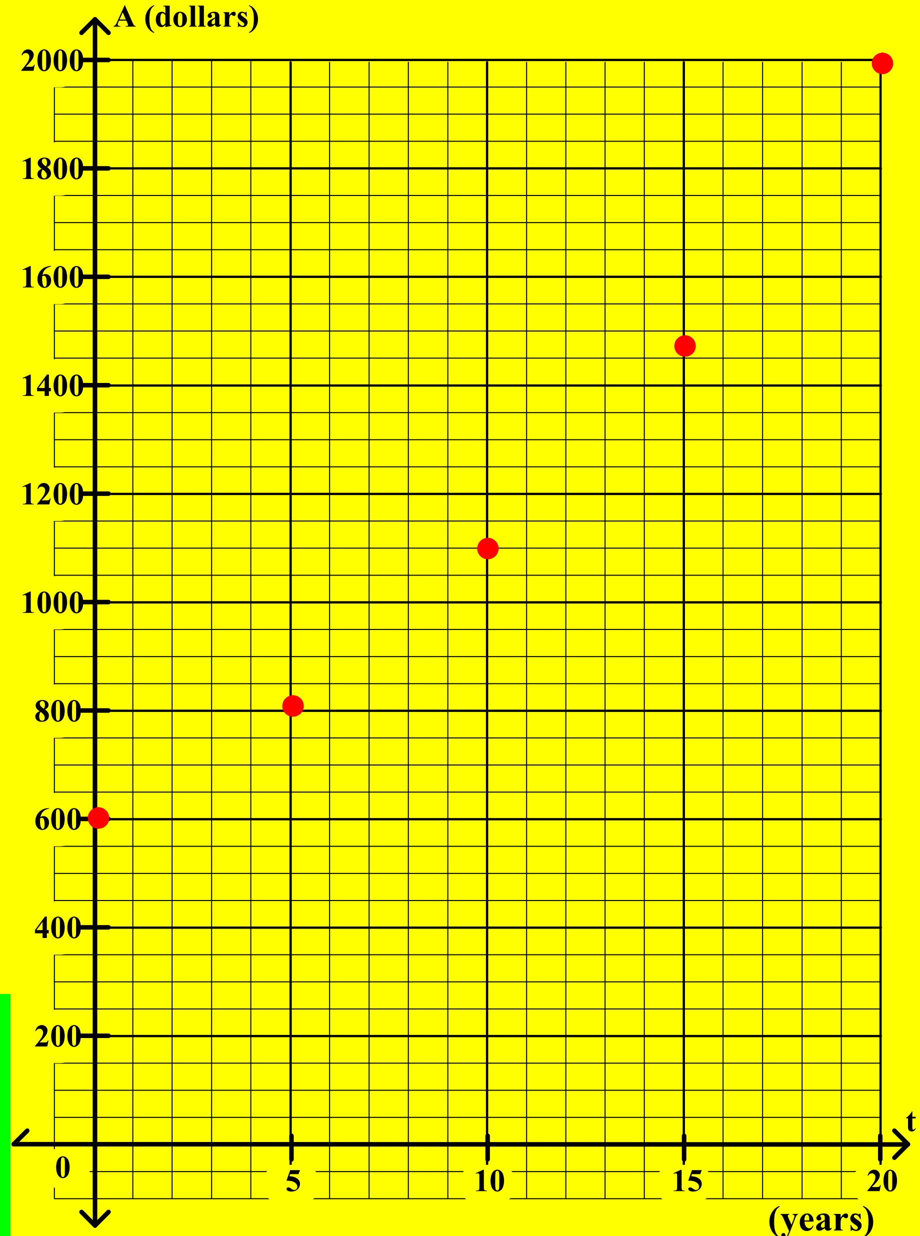

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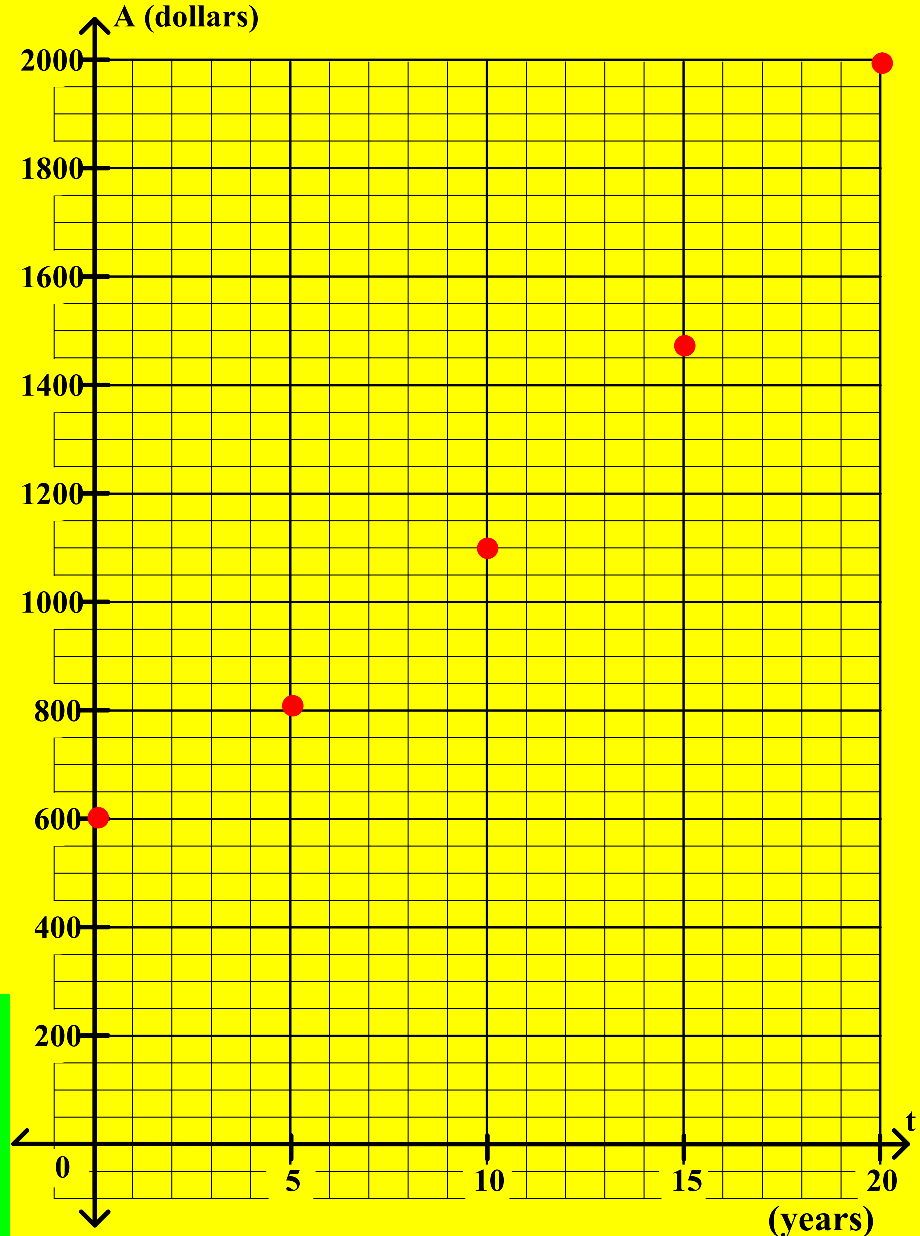

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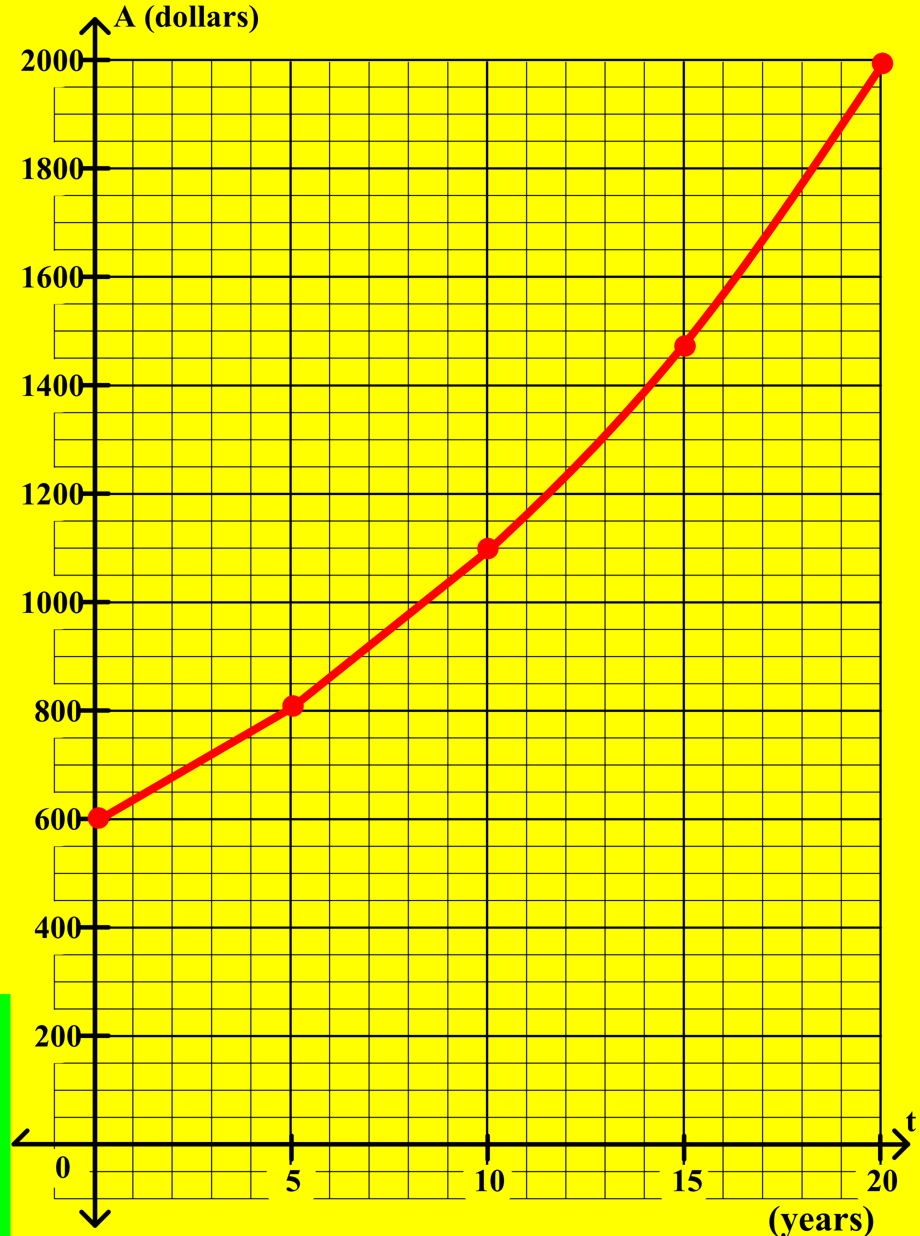

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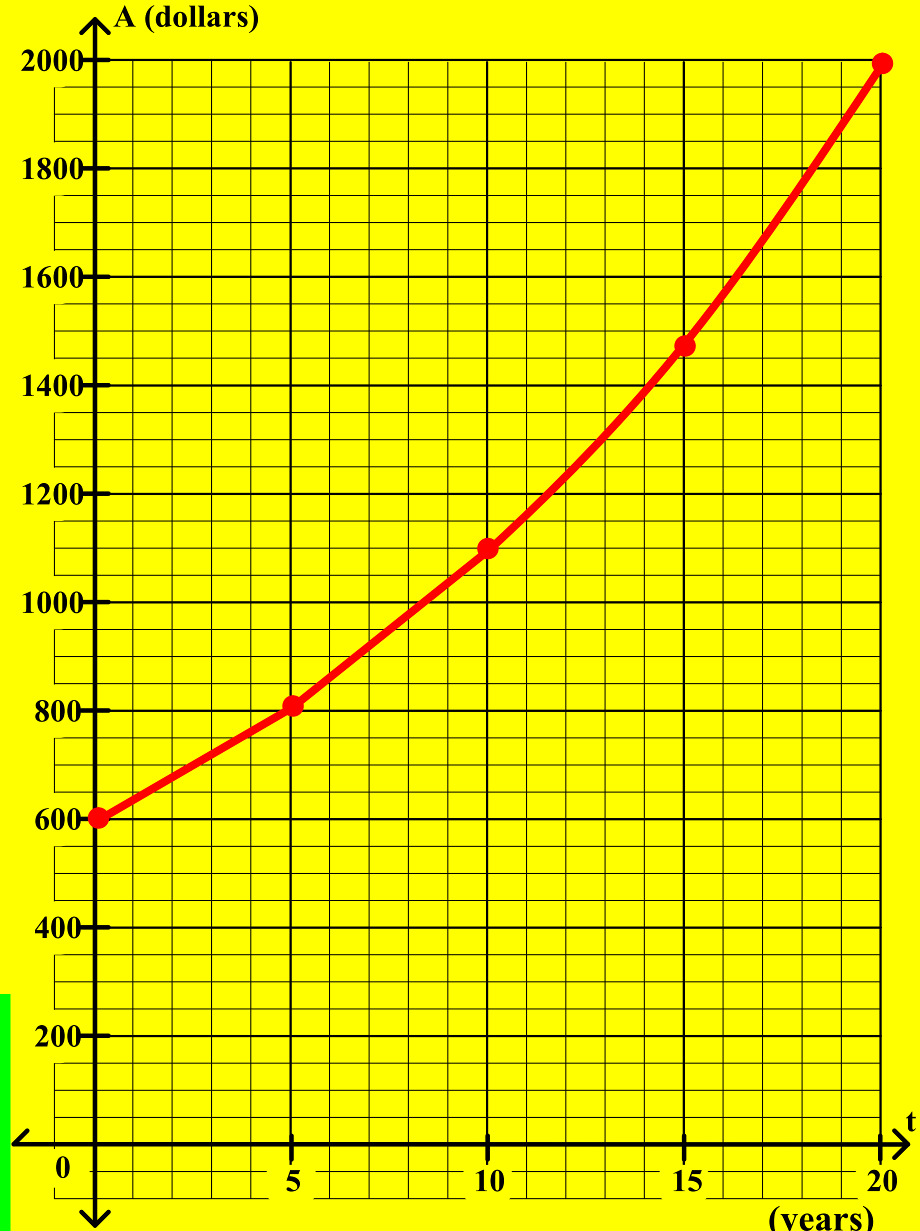

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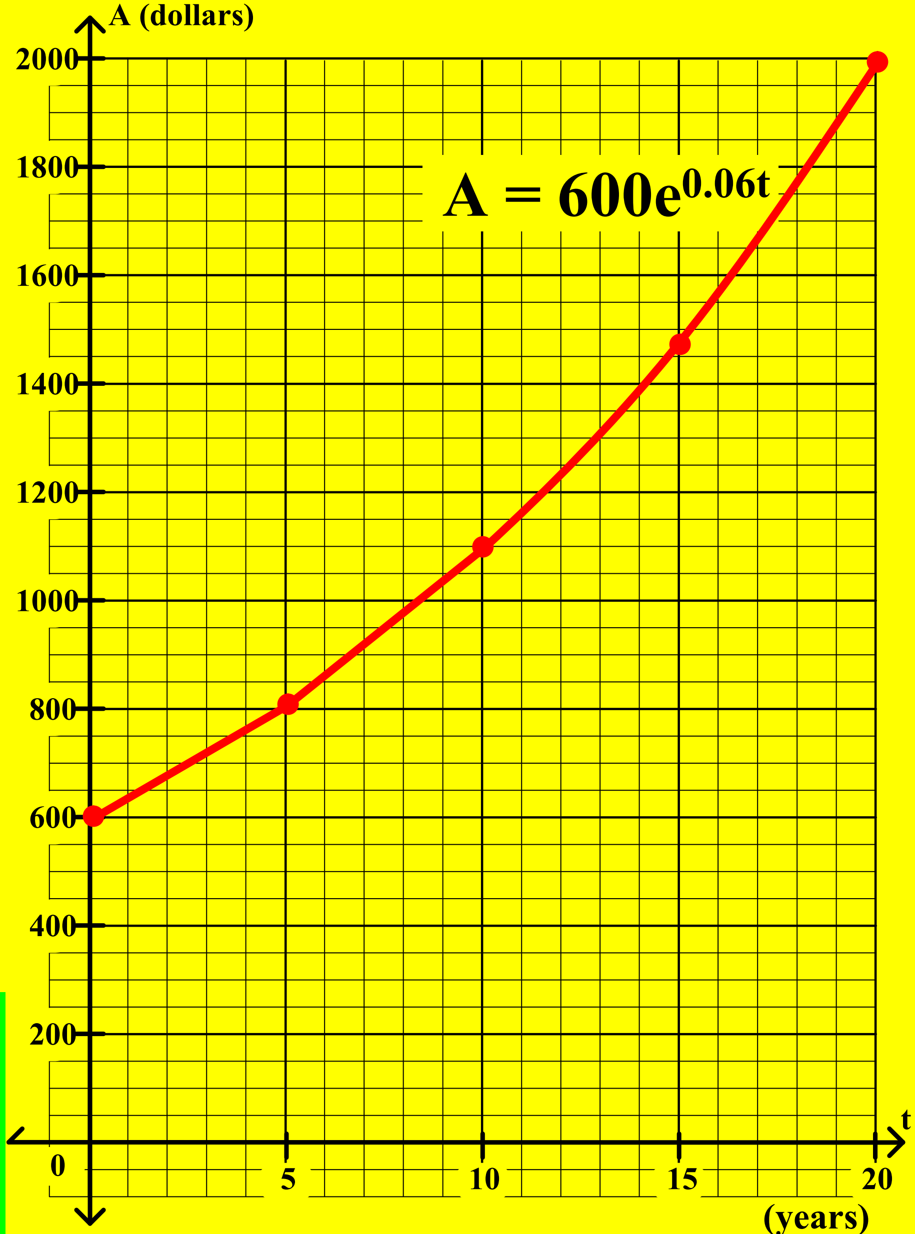

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