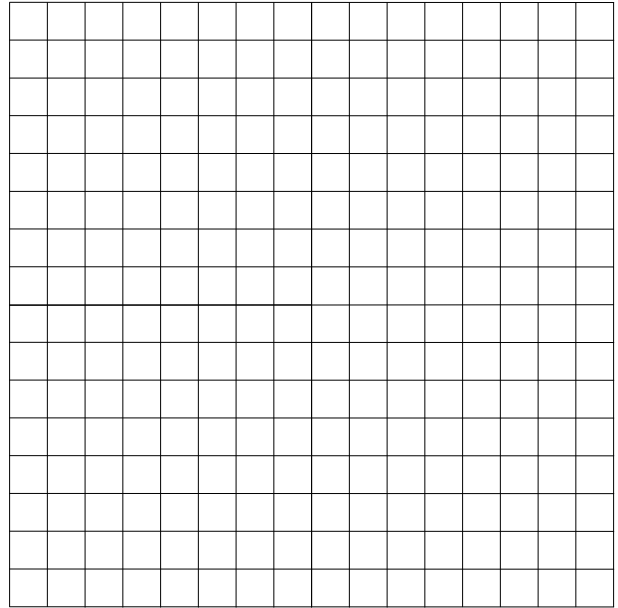


**Algebra II Class Worksheet #3 Unit 3 page 1** \_\_\_\_\_

John walks for **2 minutes** at a constant speed of **3 feet per second**. Let  $t$  represent his walking time (in **seconds**) and  $d(t)$  represent the distance he has walked (in **feet**). Answer each of the following. Show your process neatly organized.

1. Make a table giving  $t$  and  $d(t)$  every 20 seconds from  $t = 0$  to  $t = 120$ .

2. Graph function  $d$ .



3. Write an equation giving  $d(t)$  in terms of  $t$ .

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4. What is the domain of function  $d$ ?

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5. What is the range of function  $d$ ?

\_\_\_\_\_

6. Evaluate  $d(60)$ . What does  $d(60)$  represent in terms of the problem?

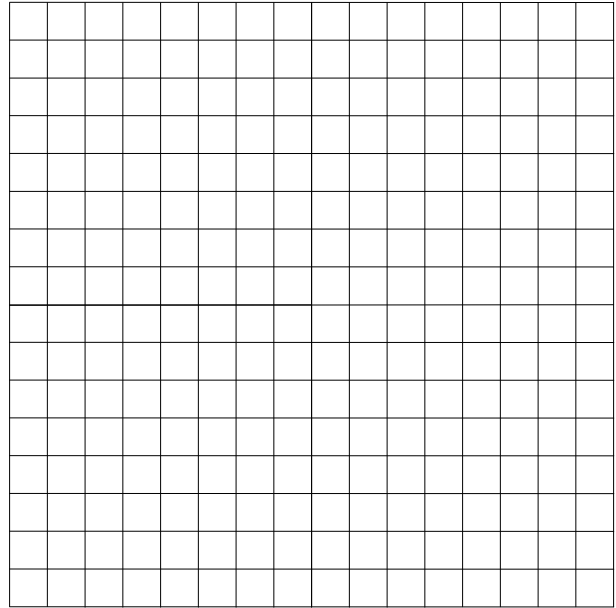
7. If  $d(t) = 60$ , then find the value of  $t$ . Describe what this value of  $t$  represents in terms of the problem.

## Algebra II Class Worksheet #3 Unit 3 page 2

Mary bikes for 3 hours at a constant speed of 10 miles per hour. Let  $t$  represent her biking time (in **hours**) and  $D(t)$  represent the distance she has gone (in **miles**). Answer each of the following. Show your process neatly organized.

8. Make a table giving  $t$  and  $D(t)$  every half hour from  $t = 0$  to  $t = 3$ .

9. Graph function  $D$ .



10. Write an equation giving  $D(t)$  in terms of  $t$ .

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11. What is the domain of function  $D$ ?

\_\_\_\_\_

12. What is the range of function  $D$ ?

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13. Evaluate  $D(1.2)$ . What does  $D(1.2)$  represent in terms of the problem?

14. If  $D(t) = 15$ , then find the value of  $t$ . Describe what this value of  $t$  represents in terms of the problem.