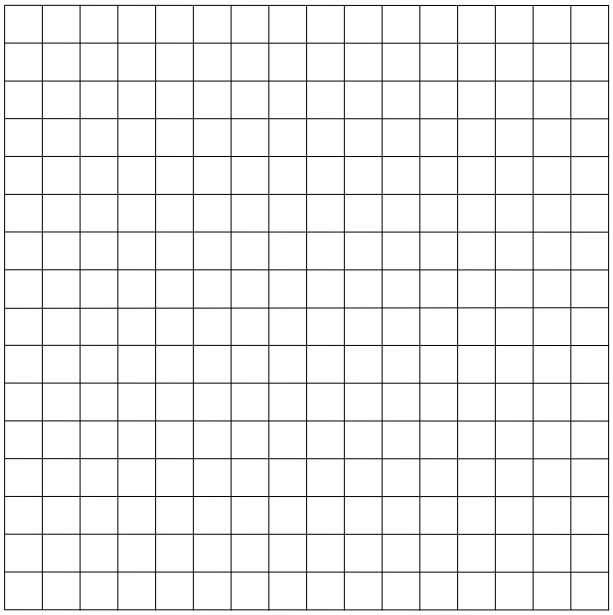
Algebra II Worksheet #3 Unit 3 page 1 _____

Jane walks for **1 minute** at a constant speed of **4 feet per second**. Let t represent her walking time (in **seconds)** and d(t) represent the distance she has walked (in **feet)**. Answer each of the following. Show your process neatly organized.

1. Make a table giving t and d(t) every 10 seconds from t = 0 to t = 60.

2. Graph function d.



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

4. What is the domain of function d?

_____

5. What is the range of function d?

_____

6. Evaluate d(20). What does d(20) represent in terms of the problem?

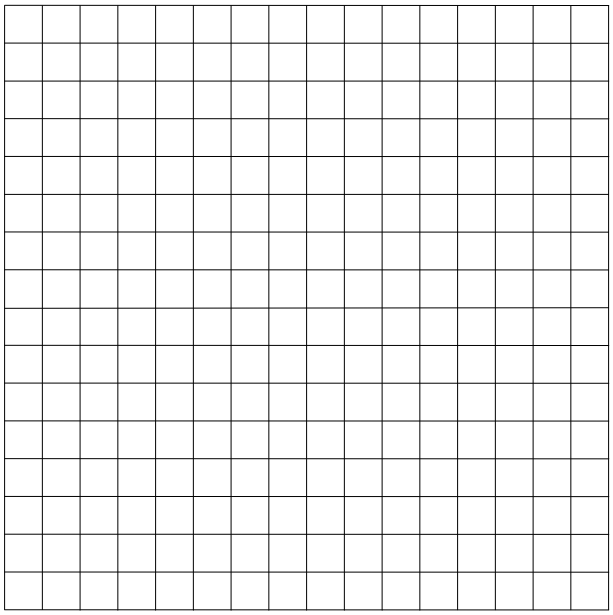
7. If d(t) = 20, then find the value of t. Describe what this value of t represents in terms of the problem.

Algebra II Worksheet #3 Unit 3 page 2

Harry bikes for 2 hours at a constant speed of 12 miles per hour. Let t represent his biking time (in **hours)** and D(t) represent the distance he 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 = 2.

9. Graph function D.



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

11. What is the domain of function D?

_____

12. What is the range of function D?

_____

13. Evaluate D(0.75). What does D(0.75) represent in terms of the problem?

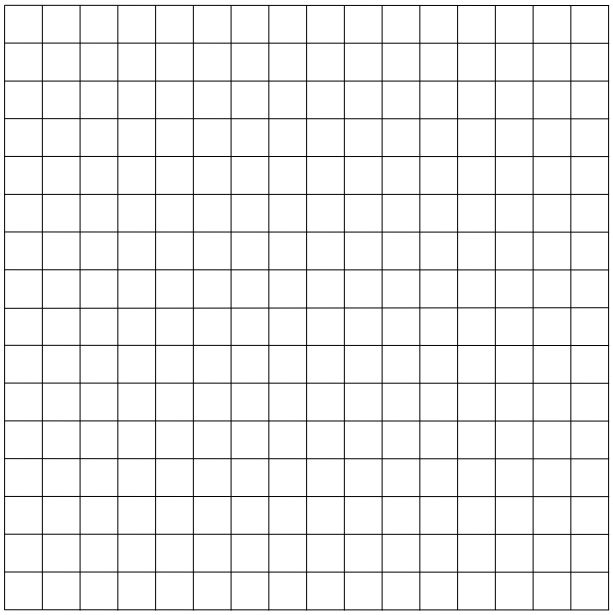
14. If D(t) = 18, then find the value of t. Describe what this value of t represents in terms of the problem.

Algebra II Worksheet #3 Unit 3 page 3

Paul walks for **3 minute**s 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.

15. Make a table giving t and d(t) every 30 seconds from t = 0 to t = 180.

16. Graph function d.



17. Write an equation giving d(t) in terms of t. _____

18. What is the domain of function d?

_____

19. What is the range of function d?

_____

20. Evaluate d(90). What does d(90) represent in terms of the problem?

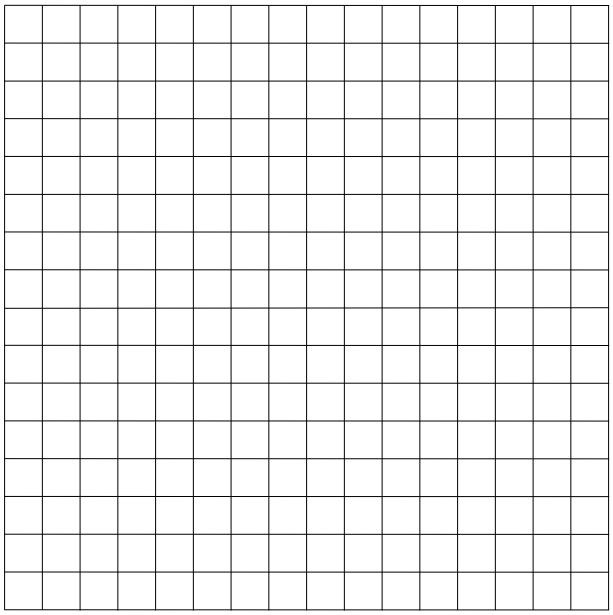
21. If d(t) = 90, then find the value of t. Describe what this value of t represents in terms of the problem.

Algebra II Worksheet #3 Unit 3 page 4

Mary bikes for 2.5 hours at a constant speed of 8 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.

22. Make a table giving t and D(t) every half hour from t = 0 to t = 2.5 .

23. Graph function D.



24. Write an equation giving D(t) in terms of t. _____

25. What is the domain of function D?

_____

26. What is the range of function D?

_____

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

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