Algebra II   Worksheet #4   Unit 3   page 1   _____
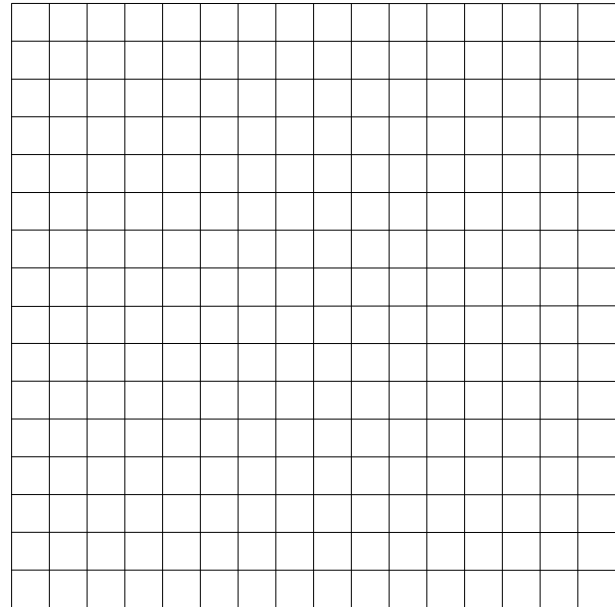
Paul has a part-time job. He can work up to 30 hours a week. He gets paid $7.50 per hour. Let t represent the number of hours he works. Let p(t) represent his total pay.

1. Make a table giving t and p(t) every 5 hours from t = 0 to t = 30.

2. Graph function p.

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

4. What is the domain of function p?

_____

5. What is the range of function p?

_____

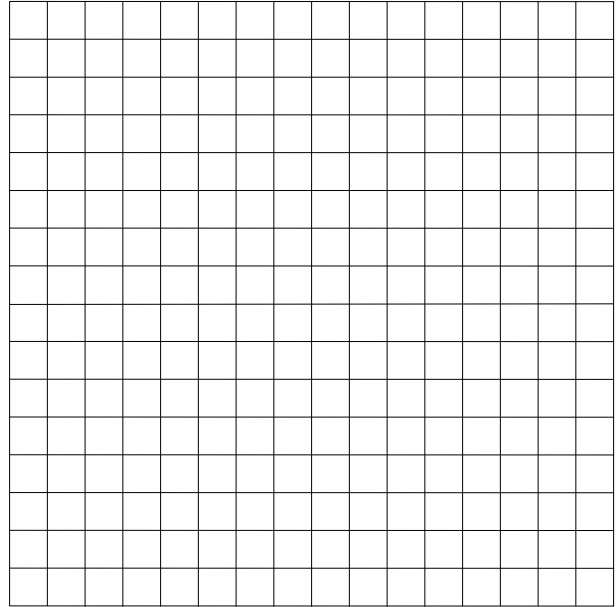6. Evaluate p(12). What does p(12) represent in terms of the problem?

7. If p(t) = 30, then find the value of t. Describe what this value of t represents in terms of the problem.

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Sue has a part-time job. She can work up to 24 hours a week. She gets paid $9 per hour. Let t represent the number of hours she works. Let P(t) represent her total pay.

8. Make a table giving t and P(t) every 4 hours from t = 0 to t = 24.

9. Graph function P.

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

11. What is the domain of function P?

_____

12. What is the range of function P?

_____

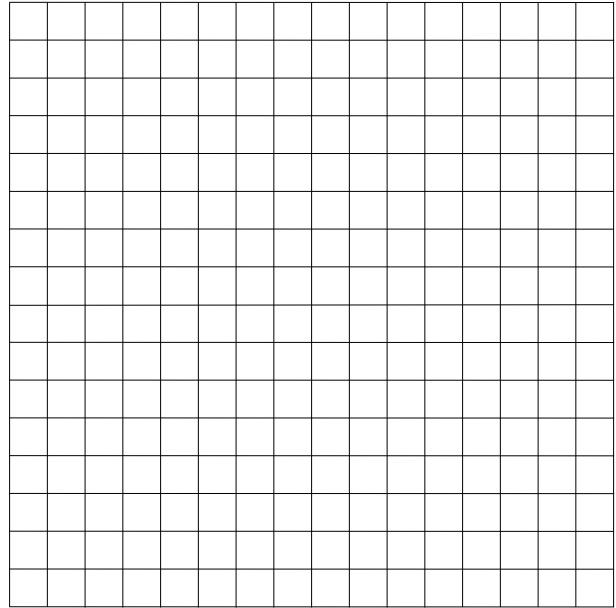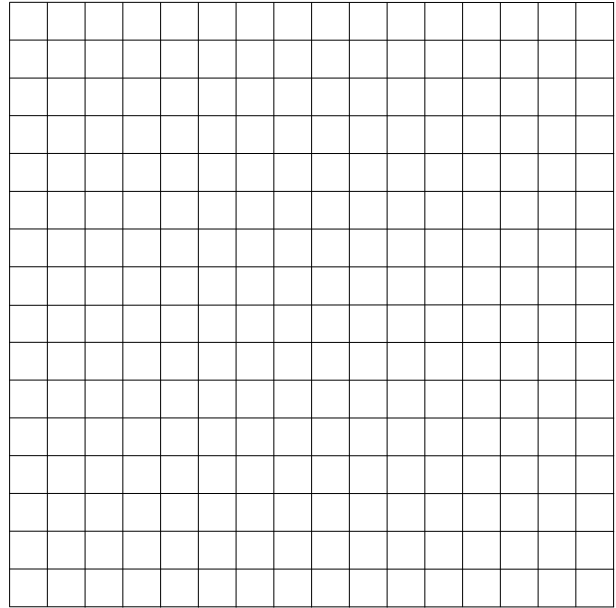13. Evaluate P(10). What does P(10) represent in terms of the problem?

14. If P(t) = 45, then find the value of t. Describe what this value of t represents in terms of the problem.

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Fantasy Island is 32 miles due east of Marine Bay. A Ferry sails from Marine Bay to Fantasy Island at a constant speed of 8 miles per hour. Let t represent the time in **hours** that the Ferry has been sailing. Let d(t) represent the **distance in miles that the Ferry is from Fantasy Island**.

15. Make a table giving t and d(t) every hour from t = 0 until the Ferry reaches Fantasy Island.

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(1.5). What does d(1.5) represent in terms of the problem?

21. If d(t) = 12, then find the value of t. Describe what this value of t represents in terms of the problem.

Joe bikes from his house to his cousin's house, a distance of 18 miles, at a constant speed of 12 miles per hour. Let t represent the time in **hours** that Joe has been biking. Let D(t) represent the **distance in miles that Joe is from his cousin's house**.

22. Make a table giving t and D(t) every half hour from t = 0 until Joe reaches his cousin's house.

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(0.5). What does D(0.5) represent in terms of the problem?

28. If D(t) = 9, then find the value of t. Describe what this value of t represents in terms of the problem.