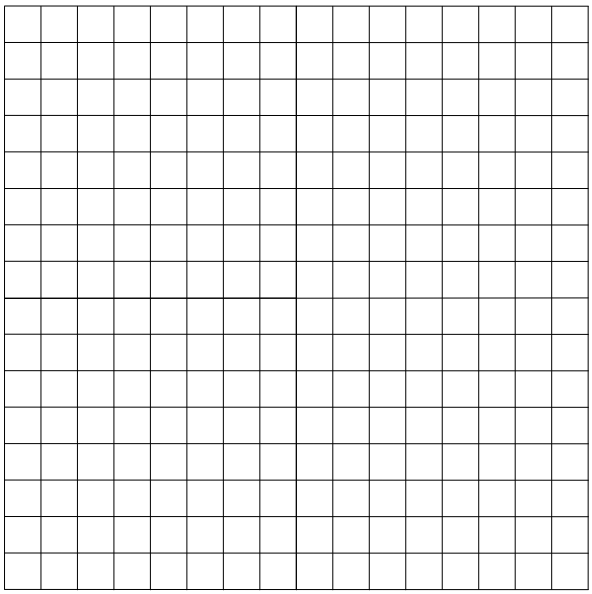
Algebra I Worksheet #8 Unit 8 page 1 _____

Mary has a part-time job. She can work up to 30 hours a week. She gets paid $7.50 per hour. Let t represent the number of hours she works. Let P(t) represent her 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. Write an inequality to describe the domain of function P. _____

5. Write an inequality to describe the range of function P. _____

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

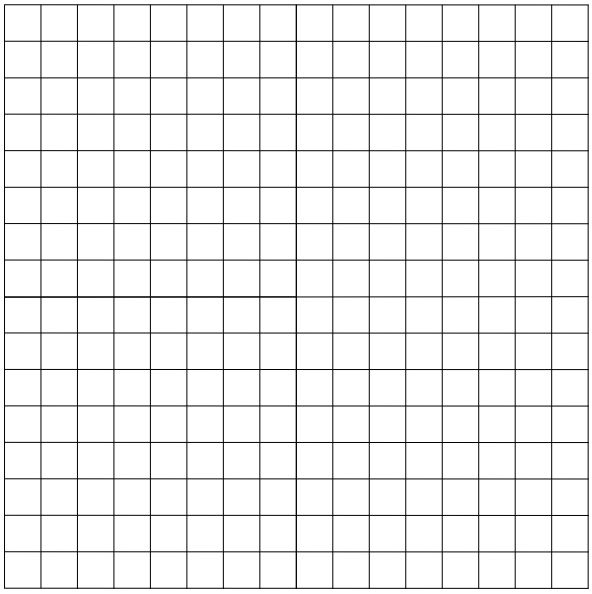
7. If P(t) = 30, then find the value of t. Describe what this value of t represents in terms of the problem.

Algebra I Worksheet #8 Unit 8 page 2

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**.

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

9. Graph function D.



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

11. Write an inequality to describe the domain of function D. _____

12. Write an inequality to describe the range of function D. _____

13. Evaluate D(1.5). What does D(1.5) represent in terms of the problem?

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