Unit 1 Corrective Assignment © 2012 Kuta Software LLC. All rights reserved.

Evaluate the expression.

1)
$$m^3$$
 when $m = \frac{1}{2}$

Find the unit rate in feet per second.

$$2) \ \frac{120YARDS}{3MINUTES}$$

Evaluate each expression.

3)
$$(1+5+5) \times 4$$

4)
$$3 - 4 \div 4 + 3$$

Evaluate each using the values given.

5)
$$y(x - (y - y))$$
; use $x = 5$, and $y = 6$

6)
$$mq \div 3 - 4$$
; use $m = 3$, and $q = 5$

Write each as an algebraic expression.

Sovlve using mental math.

9)
$$-2 = n + 5$$

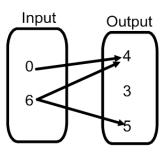
10)
$$-m + 5 \le 12$$

Directions: Tell whether each pairing is a function.

11)

| Input | 12 | 3 | 7 | 3 |
|--------|----|----|---|---|
| Output | 5 | 12 | 0 | 4 |

12)



13) Make a table for the function.

function.

$$y = 2x - 4$$

Domain: -5, -3, 0, 2

14) Make a table for the

$$y = \frac{-2x - 4}{2}$$

Domain: -4, -2, 0, 6

15) a. Identify the Domain and Range:

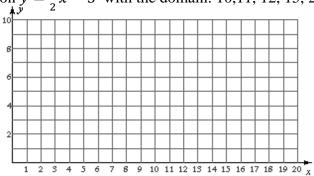
| nput. x | 1 | 2 | 3 | 4 |
|---------|---|---|---|---|

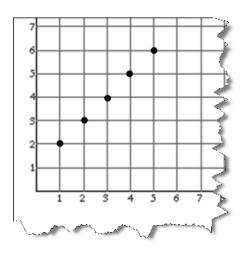
b. Make a rule.

| Input, x | 1 | 2 | 3 | 4 | |
|-----------|---|---|----|----|---|
| Output, y | 5 | 8 | 11 | 14 | |
| | | | | | • |

16) Complete the table and graph the function $y = \frac{1}{2}x - 5$ with the domain: 10,11, 12, 15, 20

| X | | | |
|---|--|--|--|
| У | | | |





4) Find the Domain and Range of the graph to the left.

Domain:

Write a rule for the function represented by the graph at the left.

Range:

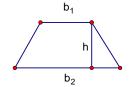
23) Find the perimeter of a rectangle when I = 51.2 and w = 8.3. Use the diagram to help.

Perimeter = 2(I + w)



24) Find the area of a trapezoid with b_1 = 6, b_2 = 12, h = 14. Use the diagram to help.

Area of Trapezoid =
$$\frac{(b_1 + b_2)h}{2}$$



25) The table below shows the number of weeks in Algebra I class and the corresponding number of students failing Algebra each week.

| Weeks, x | 2 | 3 | 4 | 5 | 6 |
|---------------------|----|----|----|----|----|
| Failing students, y | 35 | 29 | 23 | 17 | 11 |

a) Find the domain and range: domain:

range:

- b) Write a rule for the number of students failing as a function of the number of weeks.
- c) Predict how many students will be failing after 7 weeks.
- d) Graph the function.

