Name_____

Unit 1 Corrective Assignment

Evaluate the expression.

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

$(\frac{1}{2})^3 = (\frac{1}{2})(\frac{1}{2})(\frac{1}{2})$

$\boxed{= \frac{1}{8}}$

Find the unit rate in feet per second.

2) $\frac{120 YARDS}{3 MINUTES} = \frac{1 yd}{3 ft} \cdot \frac{1 min}{60 sec} = \frac{120 \cdot 1 \cdot 1}{3 \cdot 3 \cdot 60} = \frac{120}{540}$

$\boxed{= 0.22 ft/sec}$

Evaluate each expression.

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

$(11) \times 4 = 44$

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

$3 - 1 + 3$

$2 + 3 = \boxed{5}$

Evaluate each using the values given.

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

$6(5 - (6 - 6))$

$6(5 - 0)$

$6(5) = 30$

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

$3(5) \div 3 - 4$

$15 \div 3 - 4$

$5 - 4$

1

Write each as an algebraic expression.

7) q increased by 12 is greater than 7

$q + 12 > 7$

8) the quotient of n and 7 is greater than 25

$\frac{n}{7} > 25$

Sovlve using mental math.

9) $-2 = n + 5$

$-7 + 5 = -2$

-7

Check to see if 20 is a solution.

10) $-m + 5 \leq 12$

$-20 + 5 \leq 12$

$-15 \leq 12$ ✓

Yes

Directions: Tell whether each pairing is a function.

11)

Input	12	3	7	3
Output	5	12	0	4

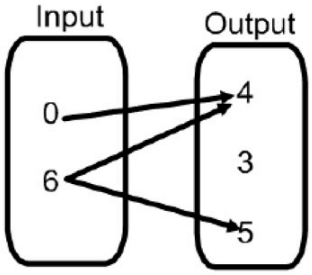
YES

EVERY INPUT ONLY GOES TO ONE OUTPUT

12)

N

6 GOES TO 2 OUTPUTS



13) Make a table for the function.

function.

y = 2x - 4

Domain: -5, -3, 0, 2

x	y
-5	-14
-3	-10
0	-4
2	0

14) Make a table for the

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

Domain: -4, -2, 0, 6

x	y
-4	2
-2	0
0	-2
6	-8

15) a. Identify the Domain and Range:

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

+3 +3 +3

D = {1, 2, 3, 4}

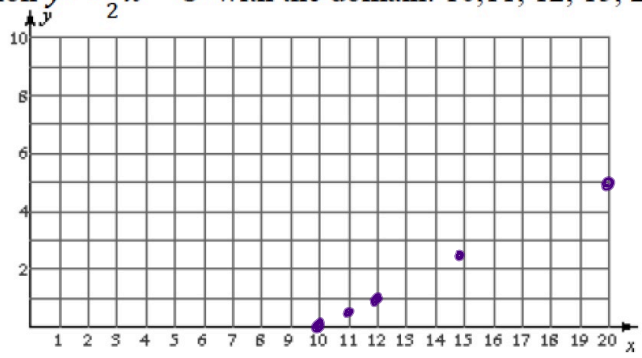
R = {5, 8, 11, 14}

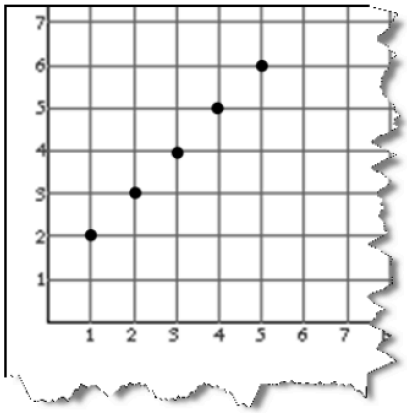
b. Make a rule.

y = 3x + 2

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

x	10	11	12	15	20
y	0	.5	1	2.5	5





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

Domain: {1, 2, 3, 4, 5} Range: {2, 3, 4, 5, 6}

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

y = x + 1

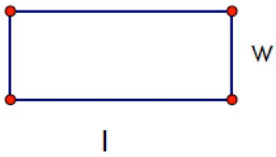
23) Find the perimeter of a rectangle when l = 51.2 and w = 8.3. Use the diagram to help.

Perimeter = 2(l + w)

$2(51.2 + 8.3)$

$2(59.5)$

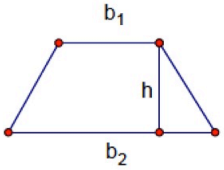
$\boxed{119}$



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

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

$$\frac{(6+12)14}{2} = \frac{(18)(14)}{2} = \frac{252}{2} = 126$$



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

−6 −6 −6

a) Find the domain and range: domain: {2, 3, 4, 5, 6} range: {35, 29, 23, 17, 11}

b) Write a rule for the number of students failing as a function of the number of weeks.

$y = -6x + 47$

c) Predict how many students will be failing after 7 weeks.

$y = -6(7) + 47$

$y = -42 + 47$

5 students

d) Graph the function.