

Find the Range given the Domain in each situation on the left. Be sure to show work.

1a) $y = 3x - 2$

Domain: $\{-1, 2, 4\}$

Range: _____

1b) Now rewrite this function as a set of ordered pairs.

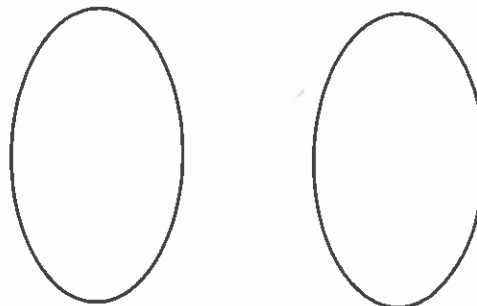
{ _____ }

2a) $y = 2x^2$

Domain: $\{-3, 0, 4\}$

Range: _____

2b) Now rewrite this function as a mapping.



3a) $f(x) = 2x^2 + 5$

Domain: $\{-2, 0, 1, 6\}$

Range: _____

3b) Now rewrite this function as a table of values.

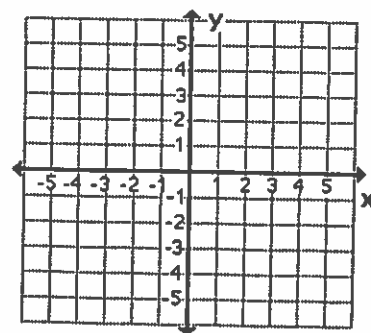
x	y

4a) $g(x) = -4 - 2x$

Domain: $\{-3, -2, -1, 0, 1\}$

Range: _____

4b) Now represent this function as a discrete graph.



Functions Worksheet 4

1. Let $g(x) = -5x + 2$. Evaluate each of the following:

(a) $g(-1)$

(b) $g(-2)$

(c) $g(0)$

(d) $g(5)$

2. Let $f(x) = 2x + 2$. Evaluate each of the following:

(a) $f(-3)$

(b) $f(6)$

(c) $f(-1)$

(d) $f(4)$

3. Let $g(x) = x^2 + 4x - 1$. Evaluate each of the following:

(a) $g(-4)$

(b) $g(8)$

(c) $g(-1)$

(d) $g(1)$

4. Let $f(x) = 3x^2 - 5x$. Evaluate each of the following:

(a) $f(2)$

(b) $f(-8)$

(c) $f(7)$

(d) $f(-1)$

5. Suppose $f(x) = 4x - 2$. Determine x such that:

(a) $f(x) = 18$

(b) $f(x) = 0$

(c) $f(x) = -2$

(d) $f(x) = \frac{1}{2}$

6. Suppose $n(x) = 7x + 4$. Determine x such that:

(a) $n(x) = 39$

(b) $n(x) = 0$

(c) $n(x) = 4$

(d) $n(x) = \frac{1}{3}$

7. Suppose $q(x) = -5x + 6$. Determine x such that:

(a) $q(x) = 21$

(b) $q(x) = 0$

(c) $q(x) = -6$

(d) $q(x) = \frac{1}{4}$

8. Suppose $g(x) = -3x + 8$. Determine x such that:

(a) $g(x) = 14$

(b) $g(x) = 0$

(c) $g(x) = -14$

(d) $g(x) = \frac{1}{5}$