

## Chapters 1 and 3 Test Review

**Solve each equation.**

1.)  $3p - p = 0$

5.)  $-2a - 4(-3a + 6) = -40 + 8a$

2.)  $a + 6 + 4 = 7a + 10$

6.)  $3 + 8(n - 5) = -37 + 8n$

3.)  $-6 - 5a + 8a = 1 + 3a$

7.)  $-5 - 4(v - 4) = 2(-v + 6) + 7$

4.)  $6(1 + 8x) = 390$

8.)  $-2(5 - 6a) - 4 = 2(2a - 3)$

**Solve each equation for the indicated variable.**

9.)  $z = \frac{m}{x}, \text{ for } x$

10.)  $g = -2x + 3, \text{ for } x$

$$11.) \ ca = \frac{r}{d}, \text{ for } a$$

$$12.) \ z = y - mx, \text{ for } x$$

$$13.) \ 2m + 3a = 1, \text{ for } a$$

$$14.) \ 4m + 4a = -5, \text{ for } a$$

$$15.) \ u = -3y + 12, \text{ for } y$$

$$16.) \ g = -3b - 32a, \text{ for } a$$

**For each function, find the indicated values.**

$$17.) \ f: x \rightarrow 7x - 2$$

$$18.) \ g: n \rightarrow |n^2 - 5n|$$

$$f(4) =$$

$$g(2) =$$

$$f(-1) =$$

$$g(-2) =$$

$$f(0) =$$

$$g(1) =$$

**Find the Range of Each Function.**

$$19.) \ f: x \rightarrow x^2 - 2x, D = \{-2, 0, 4\}$$

$$20.) \ H: x \rightarrow -6x - |x|, D = \{-1, 3, 12\}$$

**Give the Domain of each Function.**

20.)  $f(x) = 2x - 3$

21.)  $g(a) = \frac{23}{2a-12}$

22.)  $H(x) = \sqrt{x+9}$

**Let  $f(x) = 2x + 1$  and  $g(x) = |2 - 3x|$ .**

**Find the indicated values.**

23.)  $g(f(3)) =$

25.)  $g(f(0)) =$

24.)  $f(g(-2)) =$

26.)  $f(g(-4)) =$

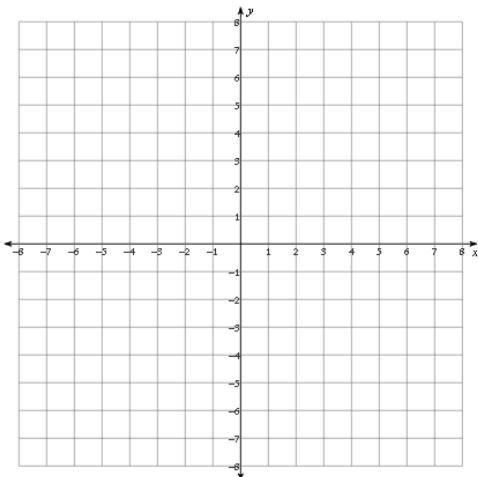
**Give the domain and range of each relation. Is the relation a function?**

27.)  $\{(2, 7), (-1, 3), (0, 7)\}$

28.)  $\{(-5, 2), (11, 51), (-5, 9)\}$

**Graph each relation. Then tell whether it is a function. If it is not a function, draw a vertical line that intersects the graph more than once.**

29.)  $\{(2, 5), (3, 1), (0, 4), (2, -3)\}$



30.)  $\{(-3, 6), (2, -2), (1, 4), (2, 7)\}$

