

Lessons 8.1-8.2 Quiz Form A

1.  $x = 6$
2.  $x = 3$
3.  $x = \pm 10$
4.  $x = \frac{3}{16}$
5.  $x = \frac{1}{11}$
6. Bill = 80, Mike = 240
7. Birth weight = 6

Lessons 8.1-8.2 Quiz Form B

1.  $y = \frac{3}{16}$
2.  $d = \frac{1}{11}$
3.  $d = \frac{27}{25} = 1 \frac{2}{25}$
4.  $x = 6$
5.  $x = 9$
6. Fred = 65, Bob = 260
7. Birth weight = 6

Lessons 8.3-8.4 Quiz Form A

1.  $x = 27.13$
2. 110
3. 212.82
4.  $33\frac{1}{3}$  percent or 33.33%
5.  $x(36) = 25$  or  $36x = 25$ ; 69.44 percent

Lessons 8.3-8.4 Quiz Form B

1.  $x = 35.46$
2.  $y = 12.75$
3. 41.07
4.  $62\frac{1}{2}$  percent or 62.5%
5.  $x(36) = 11$  or  $36x = 11$ ; 30.56 percent

Lessons 8.5-8.6 Quiz Form A

1.  $x = 1$
2.  $a = -6$
3.  $x = 1, 2$
4. 2 hours
5.  $13 \frac{1}{3}$  hours

Lessons 8.5-8.6 Quiz Form B

1.  $x = 0$
2.  $x = -9$
3.  $x = 5, -1$
4.  $1 \frac{1}{5}$  hours
5.  $26 \frac{1}{4}$  minutes

Lessons 8.7-8.8 Quiz Form A

1.  $x = \frac{2a - 7d}{d}$
2.  $x = \frac{25a}{3k}$
3.  $x = \frac{3s}{9c + 66 - s}$
4. 6 hours
5. Rate of one train = 90 mph; rate of other train = 60 mph

Lessons 8.7-8.8 Quiz Form B

1.  $x = \frac{3d - ab}{c}$
2.  $x = \frac{ck + c}{2k + 1}$  or  $\frac{c(k + 1)}{2k + 1}$
3.  $x = \frac{-3p}{2s + b + k}$
4. Mike = 14 mph, Jim = 9 mph
5. 50 mph

1.  $x = \frac{cm}{3}$
2.  $x = \frac{5}{k-3}$
3.  $y = \frac{3}{16}$
4.  $d = -40$
5.  $d = \frac{1}{11}$
6.  $x = \frac{77}{5}$
7.  $t = \frac{-1}{5}$
8.  $b = 30$
9.  $a = \frac{975408}{79300}$  or 12.30
10.  $.29(78) = x$ ,  $x = 22.62$
11.  $21 = 321x$ ,  $x = 6.5\%$
12.  $.76x = 138$ ,  $x = 181.58$
13.  $.38x = 61$ ,  $x = 160.53$
14.  $12x = 9$ , 75%
15.  $\frac{12(a+2)}{9a+2}$
16.  $\frac{5x^2 + 2x + 1}{3x - 2}$
17. \$300
18.  $B = 300 = 2B$ , 3

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19. If  $x = \#$  in second group,  $51 - x = 3x - 5$ ; or if  $x = \#$  in first group,  $x = 3(51 - x) - 5$ ; first group = 37 peaches, second group = 14
20.  $3x + \frac{3x}{2} + x = 44$ ; first side = 8, second side = 12,  
third side = 24
21.  $x = -\frac{5a + 6b}{5a - 4c - 3}$  or  $\frac{-5a - 6b}{5a - 4c - 3}$
22.  $6\left(\frac{1}{x} + \frac{1}{2x}\right) = 1$ ; Dick = 18 days, Larry = 9 days
23.  $x\left(\frac{1}{2} + \frac{1}{4} + \frac{1}{6}\right) = 1$   $\frac{1}{11}$  hours
24.  $3x + 3(x + 15) = 345$ ; 50 mph, 65 mph
25.  $75x = 50(x + 1)$ ; 2 hours

1.  $x = \frac{2y - c}{d}$
2.  $x = \frac{n}{p - a}$
3.  $z = \frac{5}{24}$
4.  $d = -40$
5.  $y = \frac{3}{11}$
6.  $x = 18$
7.  $t = \frac{2}{5}$
8.  $b = 0.20$
9.  $x = 4.1$
10.  $.35(64) = x, x = 22.4$
11.  $42 = 258x, x = 16.28\%$
12.  $.62x = 240, x = 387.10$
13.  $.24x = 75, x = 254.17$
14.  $20x = 12, 60\%$
15.  $\frac{3x(3x + 10)}{2(6 - x^2)}$
16.  $\frac{2(3y - 2 - 3y^2)}{y(3y + 1)}$
17.  $x - 800 = \frac{x}{3}, \$1200$
18.  $\frac{9}{13}$

19.  $x = 3(72 - x) - 16$ ; first group = 50 people, second group = 22

20.  $x + 2x + \frac{3}{4}(2x) = 54$ ; first side = 12, second side = 18,  
third side = 24

21.  $x = -\frac{3a + 5d + 1}{5c + 3}$

22.  $6\left(\frac{1}{x} + \frac{1}{2x}\right) = 1$ ; Gary = 9 hours, Kim = 18 hours

23.  $8\left(\frac{1}{12} + \frac{1}{x}\right) = 1$ ; 24 hours

24.  $80x = 60(x + 3)$ ; 9 hours

25.  $80x = 40(x + 2)$ ; 4 hours



Unit 9

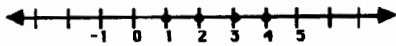
Answers

Lessons 9.1-9.2

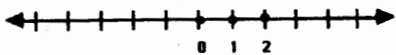
Lessons 9.1-9.2 Form A

1. finite

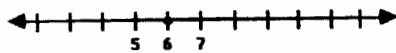
2. {1, 2, 3, 4}



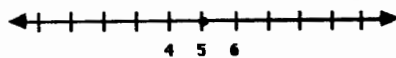
3. {2, 1, 0}



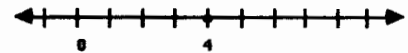
4.  $x = 6$



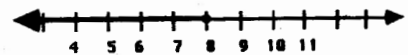
5.  $x = 5$



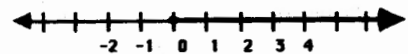
6.  $x = 4$



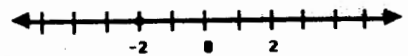
7.  $8 \geq x$



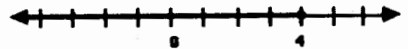
8.  $x \geq 0$



9.  $x \neq -2$



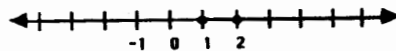
10.  $x < 4$



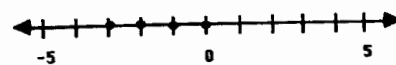
Lessons 9.1-9.2 Form B

1. infinite

2. {1, 2}

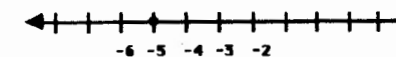


3. {-3, -2, -1, 0}

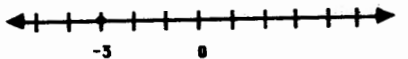


4.  $\emptyset$ , no graph

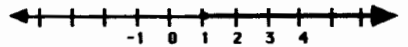
5.  $a = -5$



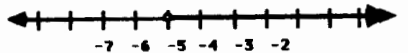
6.  $x = -3$



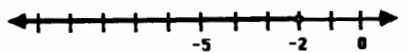
7.  $w \geq 1$



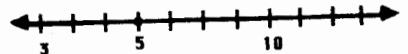
8.  $-5 < m$



9.  $x < -2$

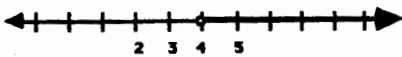


10.  $5 \neq x$

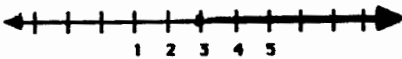


Lessons 9.3-9.4 Quiz Form A

1.  $-5 \leq 3$
2.  $-24 > -30$
3. subtracting 4
4. dividing by  $-3$
5.  $c > 4$



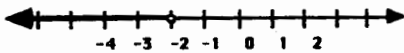
6.  $a \geq 3$



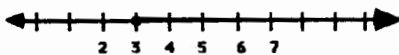
7.  $\mathbb{R}$ ; all reals

Lessons 9.3-9.4 Quiz Form B

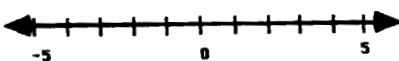
1.  $-12 \geq -18$
2.  $1 > -3$
3. multiplying by 3
4. dividing by  $-3$
5.  $d < -2$



6.  $b \geq 3$

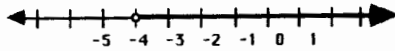


7.  $\emptyset$ , no graph

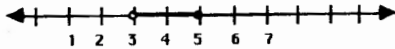


Lessons 9.5-9.6-9.7 Quiz Form A

1.  $b > -4$



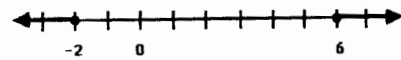
2.  $3 < x \leq 5$



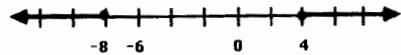
3.  $m = 4, -1$

4.  $5 = -1, \frac{11}{3}$

5.  $a \leq -2$  or  $a \geq 6$

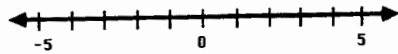


6.  $t \leq -8$  or  $t \geq 4$

Lessons 9.5-9.6-9.7 Quiz Form B

1.  $\emptyset$ , no graph

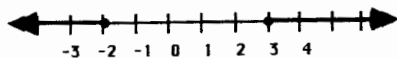
2.  $R = \{x > -8$  or  $x < 6\}$



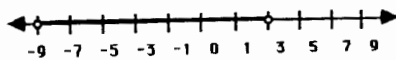
3.  $k = -2$  or  $k = 7$

4.  $k = \frac{5}{2}$  or  $x = \frac{-7}{2}$

5.  $b \geq 3$  or  $b \leq -2$

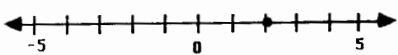
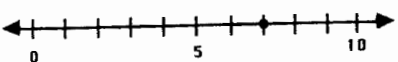
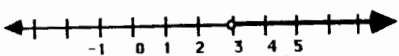
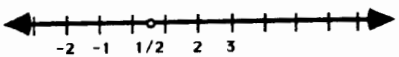
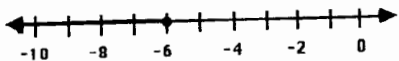


6.  $-9 < d < 3$



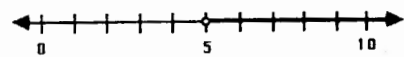
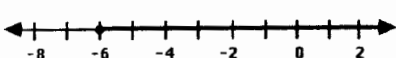
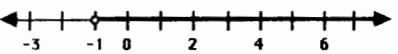
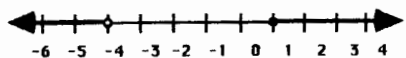
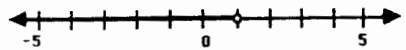
1. finite

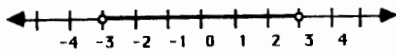
2. infinite

3. {2}  A number line with arrows at both ends. Tick marks are labeled at -5, 0, and 5. A solid dot is placed at the tick mark for 2.4. {7}  A number line with arrows at both ends. Tick marks are labeled at 0, 5, and 10. A solid dot is placed at the tick mark for 7.5.  A number line with arrows at both ends. Tick marks are labeled at -1, 0, 1, 2, 3, 4, and 5. A solid dot is placed at 3, and another solid dot is placed at 5. A line segment connects the two dots.6.  A number line with arrows at both ends. Tick marks are labeled at -2, -1, 1/2, 2, and 3. An open circle is placed at 1/2, and another open circle is placed at 3. A line segment connects the two circles.7.  A number line with arrows at both ends. Tick marks are labeled at -10, -8, -6, -4, -2, and 0. A solid dot is placed at -6, and another solid dot is placed at 0. A line segment connects the two dots.8.  $2 > -1$ 9.  $15 \geq -3$ 

10. add 10

11. divide by -4

12.  $x > 5$   A number line with arrows at both ends. Tick marks are labeled at 0, 5, and 10. An open circle is placed at 5, and a line with an arrow points to the right from the circle.13.  $\emptyset$ , no graph14.  $x \geq -6$   A number line with arrows at both ends. Tick marks are labeled at -8, -6, -4, -2, 0, and 2. A solid dot is placed at -6, and a line with an arrow points to the right from the dot.15.  $a > -1$   A number line with arrows at both ends. Tick marks are labeled at -3, -1, 0, 2, 4, and 6. An open circle is placed at -1, and a line with an arrow points to the right from the circle.16.  $x < -4$  or  $x \geq 1$ 17.  $P < 1$ 

18.  $-3 < t < 3$  A number line with arrows at both ends, ranging from -4 to 4. Tick marks are labeled at every integer: -4, -3, -2, -1, 0, 1, 2, 3, 4. Open circles are drawn at -3 and 3. A horizontal line segment connects these two open circles, representing the inequality  $-3 < t < 3$ .

19.  $p = 5, -5$

20.  $a = -4, \frac{4}{3}$

21.  $y = 0, 6$

22.  $y < -9$  or  $y > 9$

23.  $\frac{-11}{3} \leq m \leq 7$

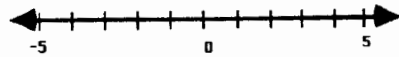
24.  $x < -4$  or  $x > 2$

25.  $p < \frac{-3}{2}$  or  $p > \frac{5}{2}$

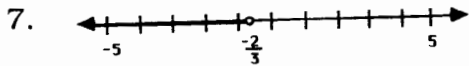
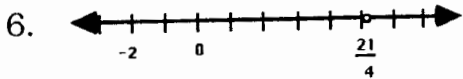
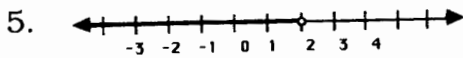
1. infinite

2. finite

3. R, {all real numbers}



4.  $\emptyset$ , no graph

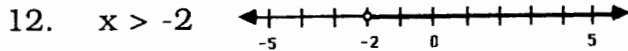


8.  $3 > -1$

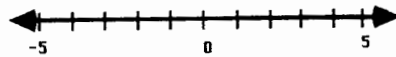
9.  $2 > -6$

10. subtract 7

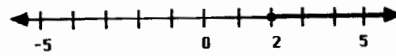
11. multiply by -4



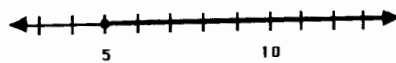
13. R, {all real numbers}



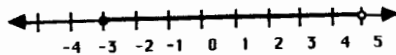
14.  $x \geq 2$



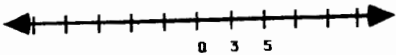
15.  $x \geq 5$

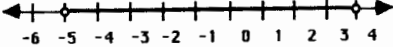


16.  $-3 < x < 5$



17. R



18.  $-5 < t < 4$  

19.  $a = 4$  or  $-4$

20.  $b = 8$  or  $-3$

21.  $y = 8$  or  $-1$

22.  $-2 \leq a \leq 2$

23.  $b \leq -1$  or  $b \geq 5$

24.  $-6 < p < 5$

25.  $-\frac{1}{4} < p < \frac{7}{4}$

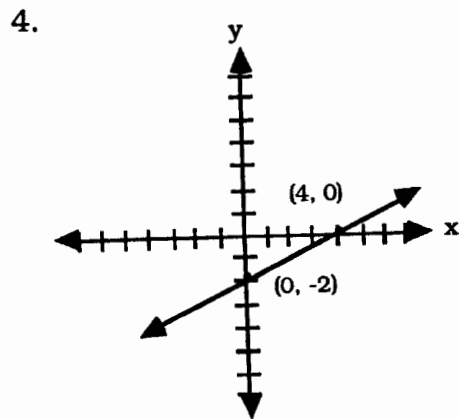
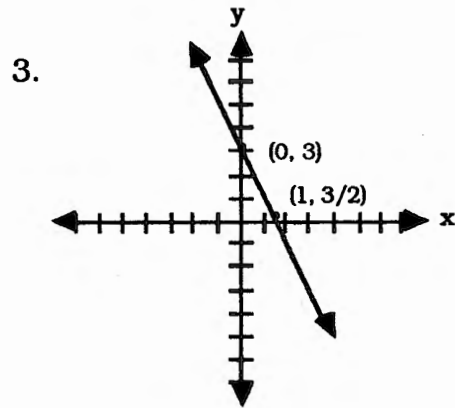
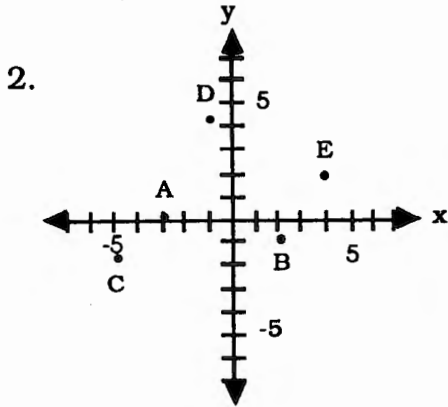
**Quizzes**

**Answers**

**Lessons 10.1-10.3**

Lessons 10.1-10.3 Quiz Form A

1.    A(1, 2)                    D(5, 7)  
      B(-2, 6)                E(8, -4)  
      C(-4, -1)



5.     $\frac{5}{3}$   
6.    Undefined



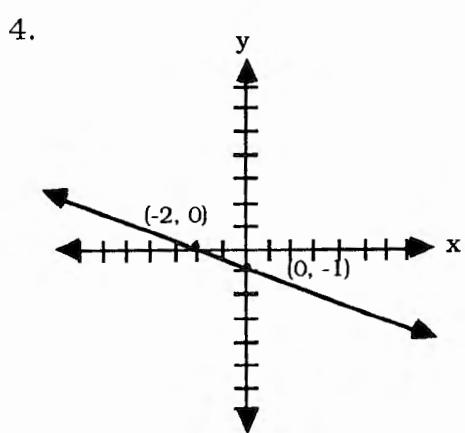
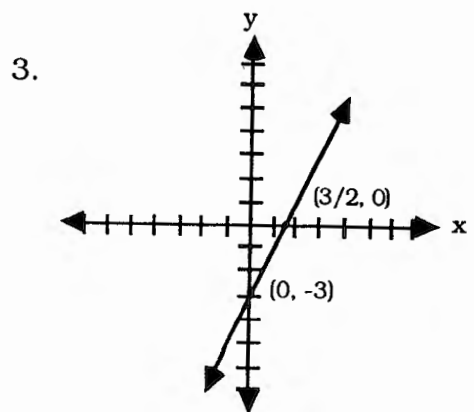
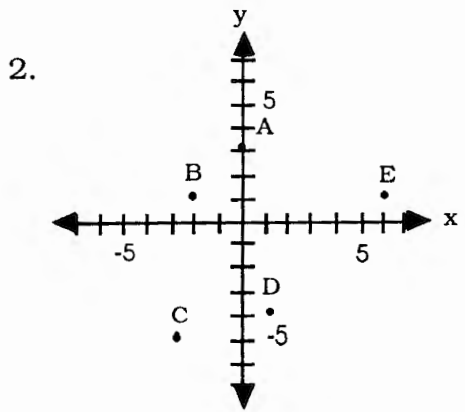
# Quizzes

# Answers

# Lessons 10.1-10.3

## Lessons 10.1-10.3 Quiz Form B

1. A(7, 1)                      D(4, 0)  
    B(-1, 5)                  E(1, -7)  
    C(-8, -2)



5.  $-\frac{9}{5}$   
6. 0

Lessons 10.4-10.5 Quiz Form A

1.  $y = 2x + 2$
2.  $y = -2x + 1$
3.  $y = \frac{3x}{4} + \frac{7}{2}$  (or  $3x - 4y = -14$ )  
 $y = \frac{13}{2}$
4.  $m = 2, b = -5$
5.  $m = \frac{3}{4}, b = -3$
6.  $y = 3x + 5$
7.  $y = -\frac{2}{3}x + 1$  (or  $2x + 3y = 3$ )

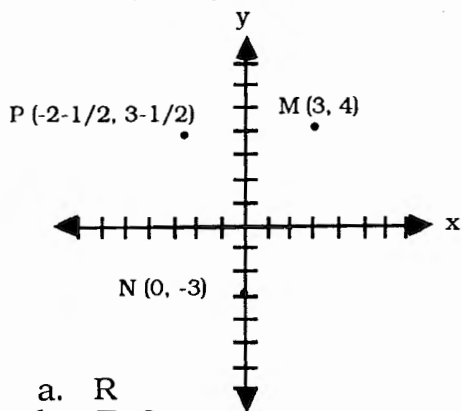
Lessons 10.4-10.5 Quiz Form B

1.  $y = -x - 2$
2.  $y = 2x - 8$
3.  $y = 3x + 5$   
 $y = 14$
4.  $m = -2, b = 4$
5.  $m = -\frac{5}{2}, b = 5$
6.  $y = -2x + 4$
7.  $y = \frac{1}{2}x - 5$ , or  $x - 2y = 5$

## Unit 10 Test Form A

1. a. P(3, 2)  
 b. Q(-2, 0)  
 c. R(2, -1)  
 d. S(-1, 3)  
 e. T(0, -2)

2.



3.

- a. R  
 b. T, Q  
 c. T, R  
 d. S

4.

$m = \frac{1}{2}$ , slant: up to the right.

5.

$m = -\frac{2}{3}$ , slant: down to the right.

6.

$m = 0$ , slant: horizontal line.

7.

$m = \text{undefined}$ , slant: vertical line.

8.

$$m = \frac{2y - 5}{2x + 5}$$

9.

$$y = \frac{1}{3}x - \frac{2}{3}$$

10.

They're not!  $\frac{5 - (-7)}{2 - (-3)} \neq \frac{5 - 13}{2 - 6}$ ;  $\frac{12}{5} \neq \frac{-6}{-4}$ ;  $\frac{12}{5} \neq \frac{3}{2}$

**Form A (continued)**

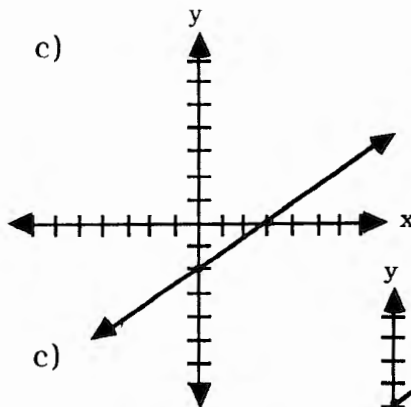
**Answers**

**Unit 10 Test**

11. a)  $m = \frac{2}{3}$

b)  $b = -2$

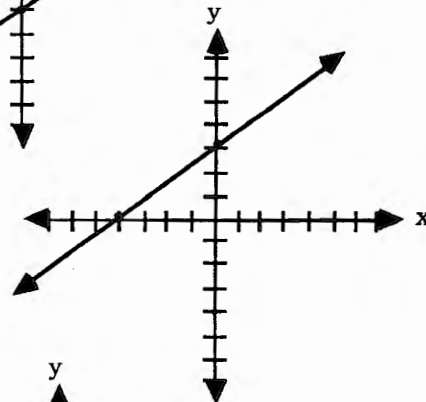
c)



12. a)  $m = \frac{3}{4}$

b)  $b = 3$

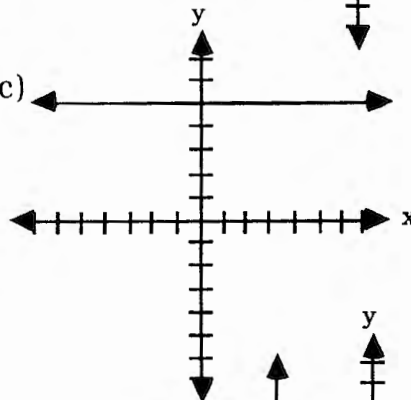
c)



13. a)  $m = 0$

b)  $b = 5$

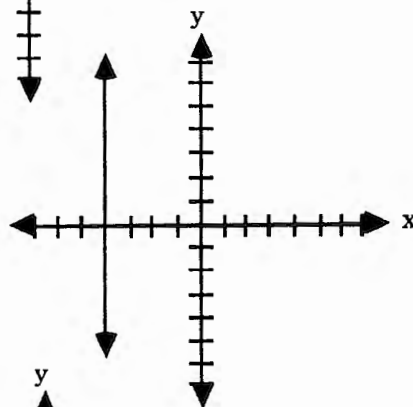
c)



14. a)  $m = \text{undef.}$

b)  $b = \text{none}$

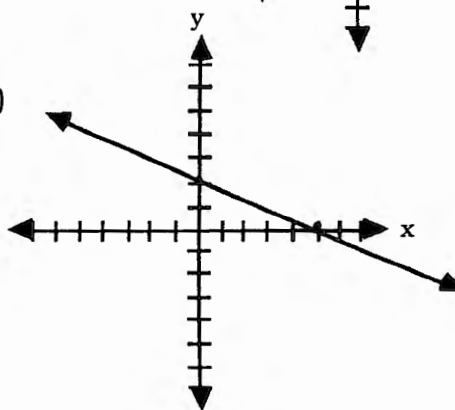
c)



15. a)  $m = -\frac{2}{5}$

b)  $b = 2$

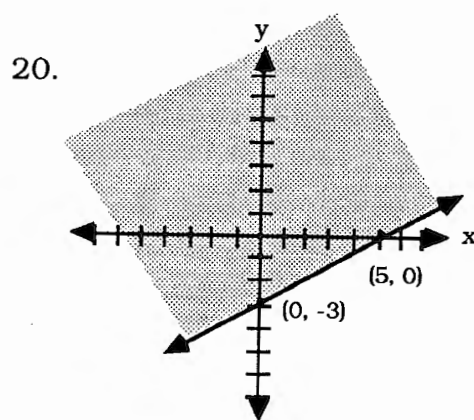
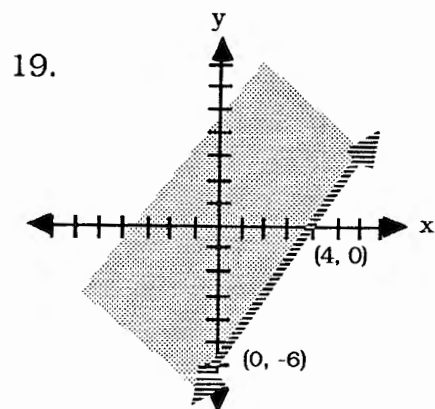
c)



16.  $5x - 7y = -46$

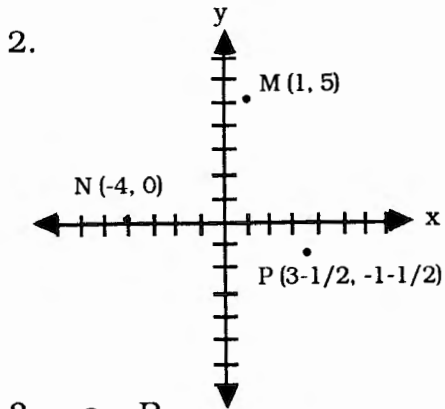
17.  $3x + 4y = -29$

18.  $x - 4y = 16$



## Unit 10 Test Form B

1. a.  $P(-1, 1)$   
 b.  $Q(2, 3)$   
 c.  $R(3, -1)$   
 d.  $S(-5, -4)$   
 e.  $T(0, -2)$



3. a. R  
 b. P  
 c. S, T, R  
 d. S
4.  $m = \frac{3}{4}$ , slant: up to the right.
5.  $m = \frac{7}{8}$ , slant: up to the right.
6.  $m = 0$ , slant: horizontal line.
7.  $m = \text{undefined}$ , slant: vertical line.
8.  $m = \frac{7y + 6}{2x - 3}$
9.  $y = 4x - 3$
10. They are!  $\frac{-2 - 5}{7 - (-3)} = \frac{5 - (-9)}{-3 - 17}$ ;  $\frac{-7}{10} = \frac{14}{-20}$ ;  $\frac{-7}{10} = \frac{-7}{10}$

**Form B (continued)**

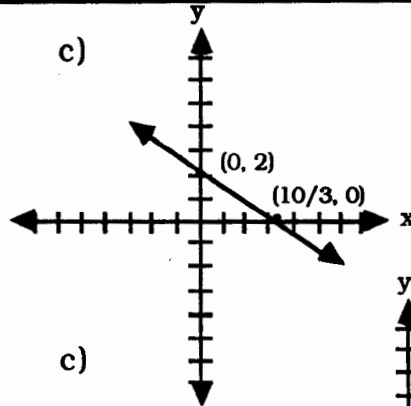
**Answers**

**Unit 10 Test**

11. a)  $m = -\frac{3}{5}$

b)  $b = 2$

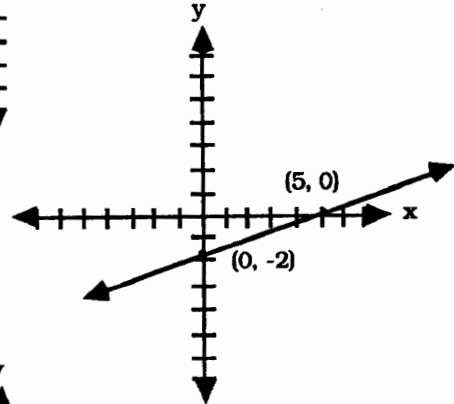
c)



12. a)  $m = \frac{2}{5}$

b)  $b = -2$

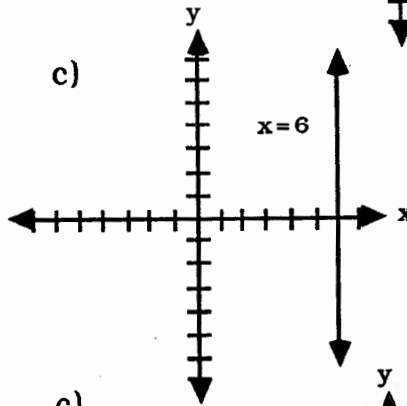
c)



13. a)  $m = \text{undef.}$

b)  $b = \text{none}$

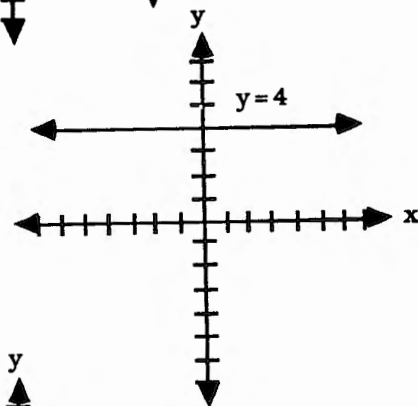
c)



14. a)  $m = 0$

b)  $b = 4$

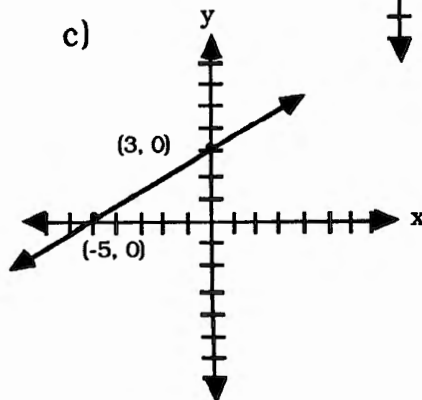
c)



15. a)  $m = \frac{3}{5}$

b)  $b = 3$

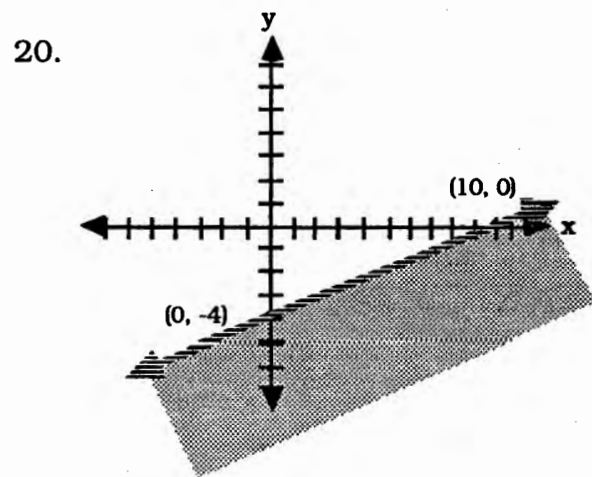
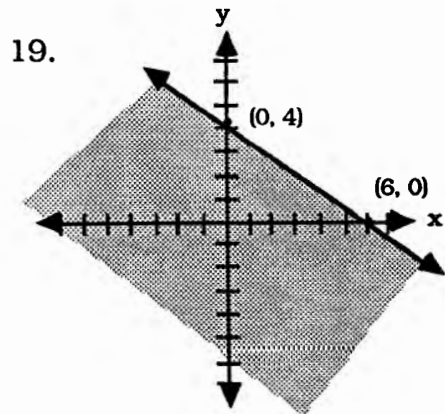
c)



16.  $2x + 3y = 11$

17.  $x + 3y = 7$

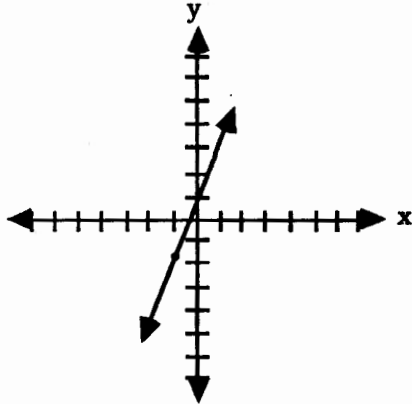
18.  $6x + 5y = 24$



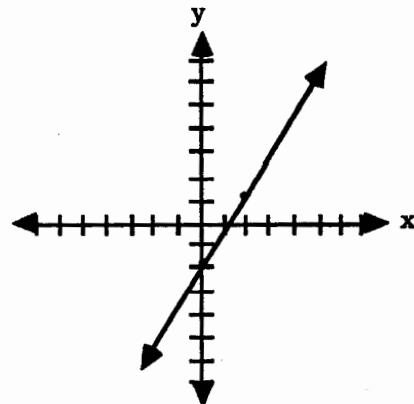


Lessons 11.1-11.2 Quiz Form A

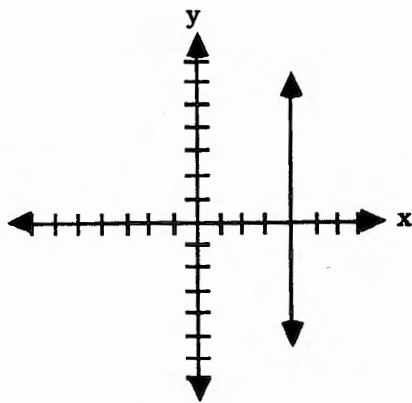
1. domain = {4, 5, 6, 7}  
range = {1, 2, 3}; yes
2. domain = {1, 2, 5, 9}  
range = {1, 3, 4, 7}; no
3. domain = {1, 2, 5, 6}  
range = {3, 5, 6}; yes
4. yes; linear function



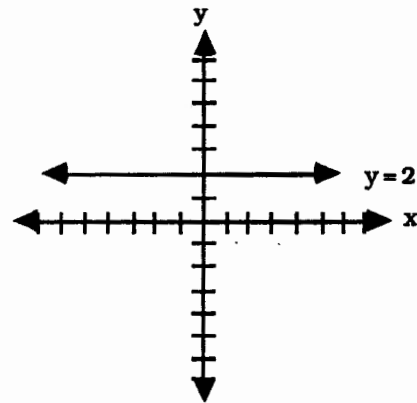
5. yes; linear function



6. no

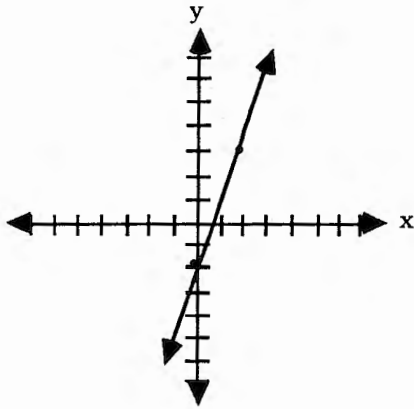


7. yes; constant function

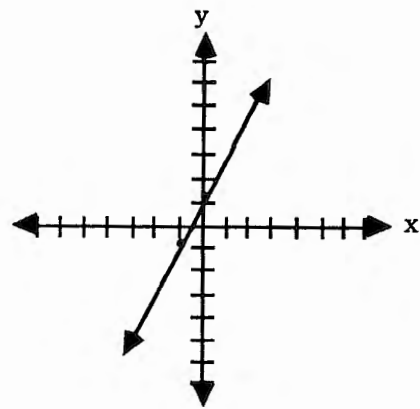


Lessons 11.1-11.2 Quiz Form B

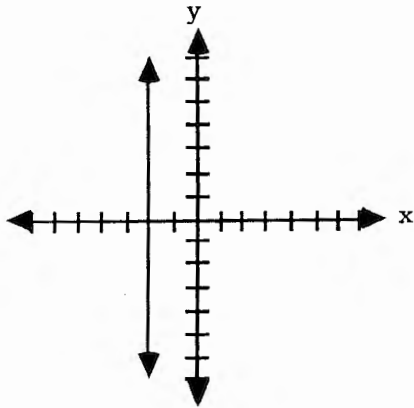
1. domain = {3, 4, 5}  
range = {2, 3, 4, 7}; no
2. domain = {2, 3, 5, 8}  
range = {1, 3, 7, 8}; no
3. domain = {0, 2, 4, 8, 9}  
range = {0, 2, 9}; yes
4. yes; linear



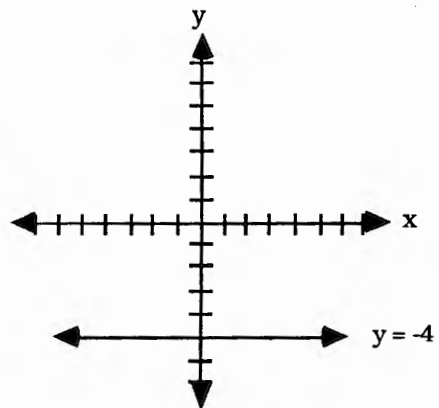
5. yes; linear



6. no



7. yes; constant function



**Quizzes****Answers****Lessons 11.3-11.4**

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**Lessons 11.3-11.4 Quiz Form A**

$$\begin{aligned} 1. \quad f(x) &= 2(2) - 3 = 1 \\ &= 2(4) - 3 = 5 \\ &= 2(6) - 3 = 9 \end{aligned}$$

$$R = \{1, 5, 9\}$$

$$\begin{aligned} 2. \quad f(x) &= (1)^2 - 1 = 0 \\ &= (3)^2 - 1 = 8 \\ &= (7)^2 - 1 = 48 \\ &= (9)^2 - 1 = 80 \end{aligned}$$

$$R = \{0, 8, 48, 80\}$$

$$\begin{aligned} 3. \quad [(2) + 1] + [2(-1)^2 - 2] &= \\ 3 + 0 &= \\ 3 & \end{aligned}$$

$$\begin{aligned} 4. \quad g(3) &= 3 + 1 = 4 \\ f[g(3)] &= f(4) \\ &= 2(4)^2 - 2 \\ &= 2(16) - 2 \\ &= 32 - 2 \\ &= 30 \end{aligned}$$

$$5. \quad \frac{7}{2.80} = \frac{2}{x}$$

$$7x = 5.60$$

$$x = .80$$

$$6. \quad \frac{3\text{cm}}{150\text{km}} = \frac{7\text{cm}}{x\text{km}}$$

$$3x = 1050\text{km}$$

$$x = 350\text{km}$$

---

Lessons 11.3-11.4 Quiz Form B

$$\begin{aligned} 1. \quad f(x) &= 5(0) - 4 = -4 \\ &= 5(2) - 4 = 6 \\ &= 5(4) - 4 = 16 \end{aligned}$$

$$R = \{-4, 6, 16\}$$

$$\begin{aligned} 2. \quad f(x) &= 2(3)^2 - 3 = 15 \\ &= 2(4)^2 - 4 = 28 \\ &= 2(5)^2 - 5 = 45 \end{aligned}$$

$$R = \{15, 28, 45\}$$

$$\begin{aligned} 3. \quad [(3)^2 - 2] - [2(-2) - 3] &= \\ 7 + 7 &= \\ 14 & \end{aligned}$$

$$\begin{aligned} 4. \quad f(3) &= 2(3) - 3 = 6 - 3 = 3 \\ g[f(3)] &= g(3) = 3^2 - 2 \\ &= 9 - 2 \\ &= 7 \end{aligned}$$

$$5. \quad \frac{3}{1.05} = \frac{7}{x}$$

$$\begin{aligned} 3x &= 7.35 \\ x &= 2.45 \end{aligned}$$

$$6. \quad \frac{6m}{5cm} = \frac{xm}{7cm} \qquad \frac{6m}{5cm} = \frac{xm}{12cm}$$

$$\begin{aligned} 5x &= 42 \\ x &= 8.4 \end{aligned}$$

$$\begin{aligned} 5x &= 72 \\ x &= 14.4 \end{aligned}$$

Dimensions are 8.4m by 14.4m.

---

Lessons 11.5-11.6 Quiz Form A

1.  $4 \cdot 9 = 6 \cdot x$   
 $36 = 6x$   
 $x = 6$

2.  $210 \cdot 5 = 105 \cdot x$   
 $1050 = 105x$   
 $x = 10\text{kg}^3$

3.

	Now	In 6 Years
Mike	$3x$	$3x + 6$
Kim	$x$	$x + 6$

$$3x + 6 = 2(x + 6)$$
$$3x + 6 = 2x + 12$$
$$x = 6$$

Mike is 18.  
Kim is 6.

4.

	Now	In 4 Years
Tim	$2x$	$2x + 4$
Kelly	$x$	$x + 4$

$$2x + 4 = (x + 4) + 8$$
$$2x + 4 = x + 12$$
$$x = 8$$

Kelly is 8.  
Tim is 16.

Lessons 11.5-11.6 Quiz Form B

1.  $6 \cdot 3 = 2 \cdot x$   
 $18 = 2x$   
 $x = 9$

2.  $150\text{m}^3 \cdot 3\text{kg} = (xm^3)(5\text{kg})$   
 $450 = 5x$   
 $x = 90\text{m}^3$

3.

	Now	11 Years Ago
Kim	$x + 7$	$(x + 7) - 11$ or $x - 4$
Tricia	$x$	$x - 11$

$x - 4 = 2(x - 11)$   
 $x - 4 = 2x - 22$   
 $18 = x$

Tricia is 18.  
 Kim is 25.

4.

	Now	In 10 Years
Mike	$x - 40$	$(x - 40) + 10$ or $x - 30$
Bill	$x$	$x + 10$

$x + 10 = 3(x - 30)$   
 $x + 10 = 3x - 90$   
 $100 = 2x$   
 $50 = x$

Bill is 50.  
 Mike is 10.

Unit 11 Test Form A

1.  $\{(-4, -1), (-2, 2), (1, 3), (2, -4), (3, 1)\}$   
 $D = \{-4, -2, 1, 2, 3\}$   
 $R = \{-4, -1, 1, 2, 3\}$   
 IS a function

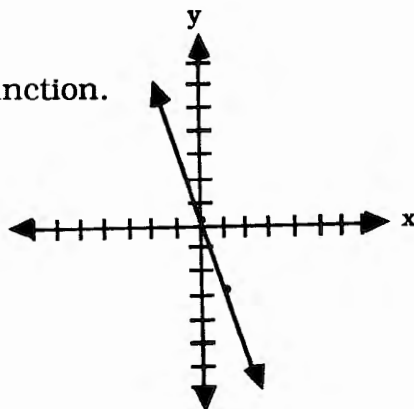
2.  $\{(-4, -3), (-2, 1), (1, 3), (1, -1), (3, -3)\}$   
 $D = \{-4, -2, 1, 3\}$   
 $R = \{-3, -1, 1, 3\}$   
 NOT a function.

3.  $D = \{-2, -1, 3, 4\}$   
 $R = \{-2, -1, 1, 4, 5\}$   
 NOT a function.

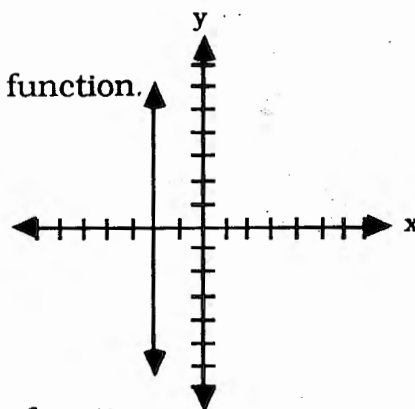
4. For  $k = \frac{1}{2}$

5.  $k = -6$

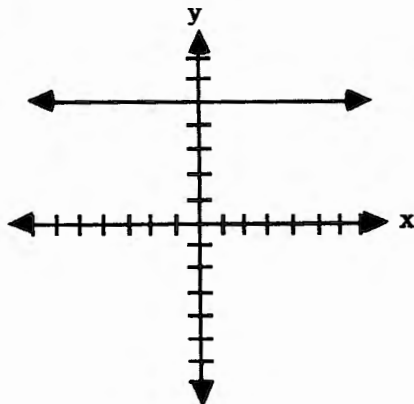
6. Linear function.



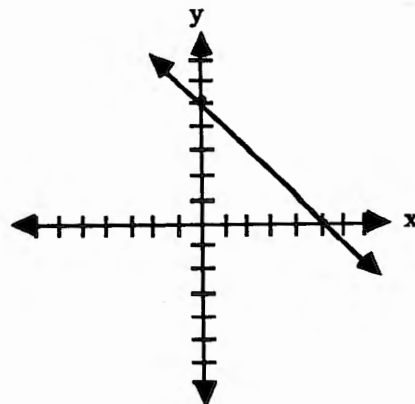
7. Not a function.



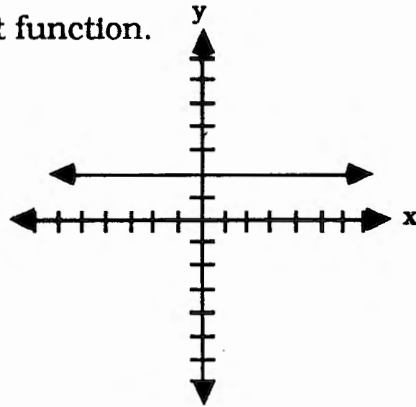
8. Constant function.



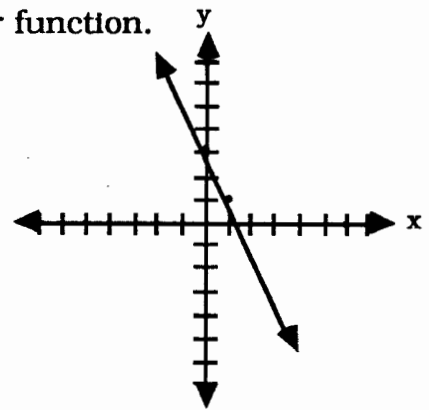
9. Linear function.



10. Constant function.



11. Linear function.



12.  $f(-3) = 1$

13.  $g(-4) = -50$

14.  $g(3) + f(2) =$   
 $18 + (-1) =$   
 $17$

15.  $g[f(3)] = g[-3] = 18$

16.  $R = \{-7, -5, 3\}$

17.  $R = \{8, 6, 2\}$

18.  $R = \{\frac{1}{2}, 0, 8\}$

19. Inversely;  $k = -10$

20. None

21. Directly;  $k = -6$

22.  $(5)(4) = (y)(10)$   
 $2 = y$

23.

	Now	In 3 Years
Skip	$x + 16$	$(x + 16) + 3$ or $x + 19$
Chan	$x$	$x + 3$

$$x + 19 + x + 3 = 32$$

$$2x + 22 = 32$$

$$2x = 10$$

$$x = 5$$

Chan is 5.  
 Skip is 21.



$$24. \quad \frac{1180}{20} = \frac{V}{36}$$

$$2V = (118)(36)$$

$$V = (59)(36)$$

$$V = 2124\text{cm}^3$$

$$25. \quad \frac{4}{6} = \frac{y}{15}$$

$$6y = 60$$

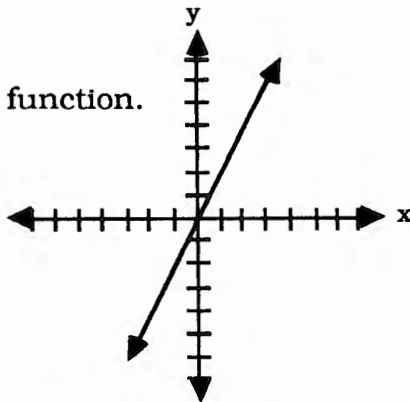
$$y = 10$$

Unit 11 Test Form B

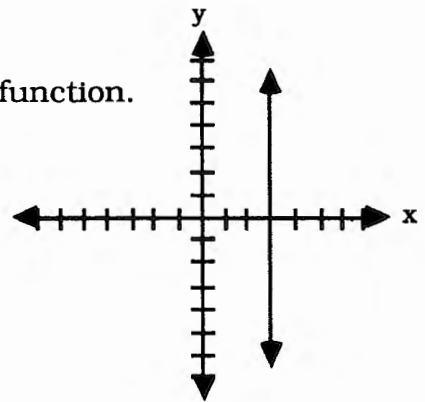
1.  $\{(1, 1), (2, 3), (3, 2), (4, 4), (5, 2)\}$   
 $D = \{1, 2, 3, 4, 5\}$   
 $R = \{1, 2, 3, 4\}$   
 IS a function
2.  $\{(-2, 2), (-2, -1), (1, 3), (1, 1), (1, -2)\}$   
 $D = \{-2, 1\}$   
 $R = \{-2, -1, 1, 2, 3\}$   
 NOT a function.
3.  $D = \{-1, 0, 1, 3, 4\}$   
 $R = \{-1, 0, 1, 4\}$   
 IS a function.
4.  $k = -\frac{1}{2}$

5.  $k = 2$

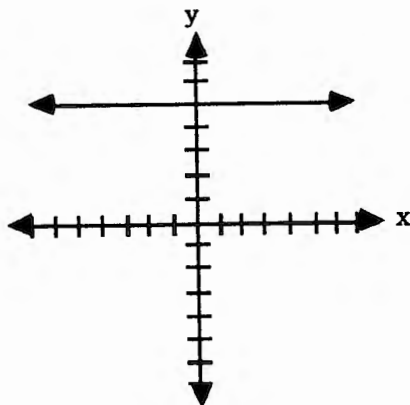
6. Linear function.



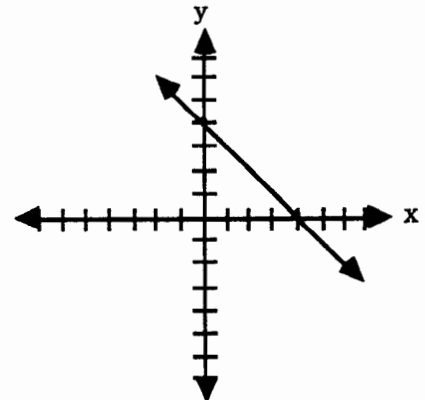
7. Not a function.



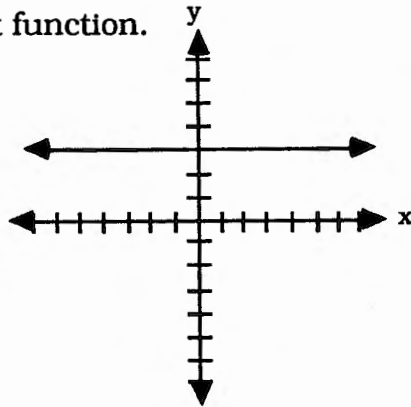
8. Constant function.



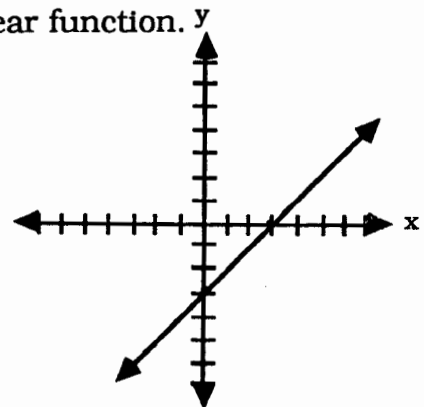
9. Linear function.



10. Constant function.



11. Linear function.



12.  $g(-5) = -1$

13.  $f(-4) = 20$

14. 12

15. 13

16.  $R = \{-6, -1, 9\}$

17.  $R = \{3, 4\}$

18.  $R = \left\{ \frac{1}{7}, \frac{13}{10}, 31 \right\}$

19. Directly as  $x$ ; constant = 520. Inversely as  $x$ ; constant = 3021. Directly as  $x$ ; constant = -3

22.  $y = 3; \frac{6}{4} = \frac{y}{2}$

23. \$28;  $\frac{16}{4} = \frac{x}{7}$

24. 220km;  $\frac{100}{5} = \frac{x}{11}$

25.  $\frac{51}{155}$ ;  $3(17) = 155y$

