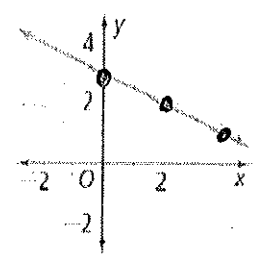
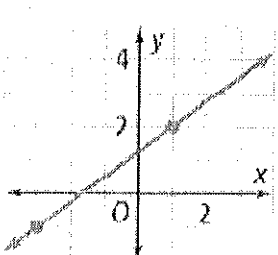
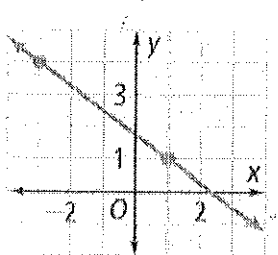
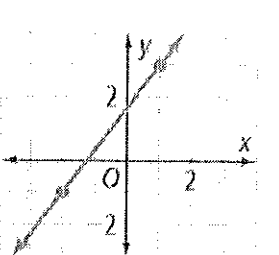


Key  
Mid-Chapter 5 Quiz Review

<p>Write an equation that passes through the given 2 points or point and slope in both point-slope form and slope-intercept form. Choose 6 from questions 1 - 14 to graph.</p>		<p>1.) (3, 4) and (5, 8)</p> $y - 4 = 2(x - 3)$ $y = 2x - 2$	<p>2.) (4, 5) and (0, 3)</p> $y - 3 = \frac{1}{2}(x - 0)$ $y = \frac{1}{2}x + 3$
<p>3.) (1, 4) and (-1, 1)</p> $y - 4 = \frac{3}{2}(x - 1)$ $y = \frac{3}{2}x + 2.5$	<p>4.) (2, 4) and (-3, -6)</p> $y - 4 = 2(x - 2)$ $y = 2x$	<p>5.) (-2, 2) and (-2, 10)</p> $x = -2$	<p>6.) (4, -1) and (-8, 7)</p> $y + 1 = -\frac{2}{3}(x - 4)$ $y = -\frac{2}{3}x + 1.67$
<p>7.) (-2, -3) and (2, -5)</p> $y + 3 = -\frac{1}{2}(x + 2)$ $y = -\frac{1}{2}x - 4$	<p>8.) (-3, 8) and (-3, 10)</p> $x = -3$	<p>9.) (3, 0.5) and (10, -0.2)</p> $y - 0.5 = -0.1(x - 3)$ $y = -0.1x + 0.8$	<p>10.) (-6, 5) and (1, 0)</p> $y - 0 = -\frac{5}{7}(x - 1)$ $y = -\frac{5}{7}x + \frac{5}{7}$
<p>11.) (3, -4) m = 6</p> $y + 4 = 6(x - 3)$ $y = 6x - 22$	<p>12.) (4, 0) m = -1</p> $y - 0 = -1(x - 4)$ $y = -1x + 4$	<p>13.) (5, 3) m = undefined</p> $x = 5$	<p>14.) (5, 3) m = 0</p> $y - 3 = 0(x - 5)$ $y = 3$
<p>Identify the slope and point on the line.</p>	<p>15.) <math>y + 3 = -1/2(x - 10)</math></p> $m = -\frac{1}{2}$ $(10, -3)$	<p>16.) <math>y - 3 = 3(x - 1/3)</math></p> $m = 3$ $(\frac{1}{3}, 3)$	<p>17.) <math>y + 12 = 5(x + 4)</math></p> $m = 5$ $(-4, -12)$

Identify the slope and y-intercept	18.) $y = 4x - 2$ $\uparrow$ $\uparrow$ $m$ $b$	19.) $y = \frac{4}{5}x + 7$ $\uparrow$ $\uparrow$ $m$ $b$	20.) $y = 2x - \frac{9}{2}$ $\uparrow$ $\uparrow$ $m$ $b$
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Write the equation of the given graph in slope-intercept form

21.) $y = -\frac{1}{2}x + 3$ 	22.) $y = \frac{3}{4}x + 1.25$ 	23.) $y = -\frac{3}{4}x + 1.75$ 	24.) $y = \frac{4}{3}x + 1.67$ 
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Find the missing coordinate.	25.) (2, 2) and (5, y) slope = 2 $\frac{y-2}{5-2} = 2$ $\frac{y-2}{3} = \frac{2}{1}$ $y-2 = 2$ $y = 4$	26.) (9, 4) and (x, 6) slope = -1/3 $\frac{6-4}{x-9} = -\frac{1}{3}$ $\frac{2}{x-9} = -\frac{1}{3}$ $6 = -x + 9$ $-3 = -x$ $3 = x$	27.) (-12, 9) and (x, -2) slope = -1/2 $\frac{-2-9}{x+12} = -\frac{1}{2}$ $\frac{-11}{x+12} = -\frac{1}{2}$ $-22 = -x - 12$ $-10 = -x$ $10 = x$
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28)

$y = 30.4$   
 $x = 9.5$

$y = 22$   
 $x = ?$

$30.4 = k(9.5)$   
 $3.2 = k$

$22 = 3.2x$   
 $6.875 = x$

$y = 3.2x$

29)

distance = y

square of speed = x

(250) = y

(100)<sup>2</sup> = x

$250 = k(100^2)$   
 $250 = k(3000)$   
 $\frac{5}{72} = k$

$y = \frac{5}{72}(916)^2$   
 $y = \frac{5}{72}(9216)$   
 $y = 640 \text{ feet}$

1.  $(3, 4) (5, 8)$   
 $\frac{8-4}{5-3} = \frac{4}{2} = 2$

$$4 = 2(3) + b$$

$$4 = 6 + b$$

$$-6 - 6$$

$$-2 = b$$

P.S.:  $y - 4 = 2(x - 3)$   
 S.I.:  $y = 2x - 2$

6.  $(4, -1) (-8, 7)$   
 $\frac{7+1}{-8-4} = \frac{8}{-12} = -\frac{2}{3}$

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

$$-1 = -\frac{2}{3}(\frac{4}{1}) + b$$

$$-1 = -\frac{8}{3} + b$$

$$+\frac{8}{3} \quad +\frac{8}{3}$$

$$1.67 = b$$

P.S.:  $y - 3 = \frac{1}{2}(x - 0)$   
 S.I.:  $y = \frac{1}{2}x + 3$

3.  $(1, 4) (2, 1)$   
 $\frac{1-4}{2-1} = \frac{-3}{-1} = 3$

$$4 = \frac{3}{2}(1) + b$$

$$4 = \frac{3}{2} + b$$

$$-\frac{3}{2} - \frac{3}{2}$$

$$2.5 = b$$

P.S.:  $y + 1 = -\frac{2}{3}(x - 4)$   
 S.I.:  $y = -\frac{2}{3}x + 1.67$

P.S.:  $y - 4 = \frac{3}{2}(x - 1)$   
 S.I.:  $y = \frac{3}{2}x + 2.5$

7.  $(-2, -3) (2, -5)$   
 $\frac{-5+3}{2+2} = \frac{-2}{4} = -\frac{1}{2}$

4.  $(2, 4) (-3, -4)$   
 $\frac{-4-4}{-3-2} = \frac{-8}{-5} = 1.6$

$$4 = 2(2) + b$$

$$4 = 4 + b$$

$$0 = b$$

$$-3 = -\frac{1}{2}(-2) + b$$

$$-3 = 1 + b$$

$$-4 = b$$

P.S.:  $y - 4 = 2(x - 2)$   
 S.I.:  $y = 2x$

P.S.:  $y + 3 = -\frac{1}{2}(x + 2)$   
 S.I.:  $y = -\frac{1}{2}x - 4$

5.  $(-2, 2) (-2, 10)$   
 $\frac{10-2}{-2+2} = \frac{8}{0} = \text{undefined}$

P.S.:  $x = -2$   
 S.I.:  $x = -2$

8.  $(-3, 8) (-3, 10)$   
 $\frac{10-8}{-3+3} = \frac{2}{0} = \text{undefined}$

P.S.:  $x = -3$

S.I.:  $x = -3$

9.  $(3, 0.5) (10, -2)$   
 $\frac{-2 - 0.5}{10 - 3} = \frac{-2.5}{7} = -0.357$

P.S.:  $y - 0.5 = -0.1(x - 3)$   
 S.I.:  $y = -0.1x + 0.8$

$0.5 = -0.1(3) + b$

$0.5 = -0.3 + b$

$+0.3 \quad +0.3$

$0.8 = b$

10.  $(-6, 5) (1, 0)$   
 $\frac{0-5}{1+6} = \frac{-5}{7}$

$0 = -\frac{5}{7}(1) + b$

$0 = -\frac{5}{7} + b$

$\frac{5}{7} = b$

P.S.:  $y - 0 = -\frac{5}{7}(x - 1)$   
 S.I.:  $y = -\frac{5}{7}x + \frac{5}{7}$

11.  $(3, -4) m = 6$

P.S.:  $y + 4 = 6(x - 3)$

S.I.:  $y = 6x - 22$

$-4 = 6(3) + b$

$-4 = 18 + b$

$-18 - 18$

$-22 = b$

12.  $(4, 0) m = -1$

P.S.:  $y - 0 = -1(x - 4)$

S.I.:  $y = -1x + 4$

$0 = -1(4) + b$

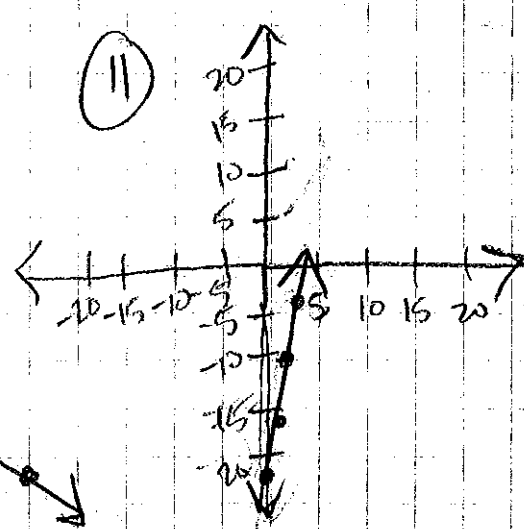
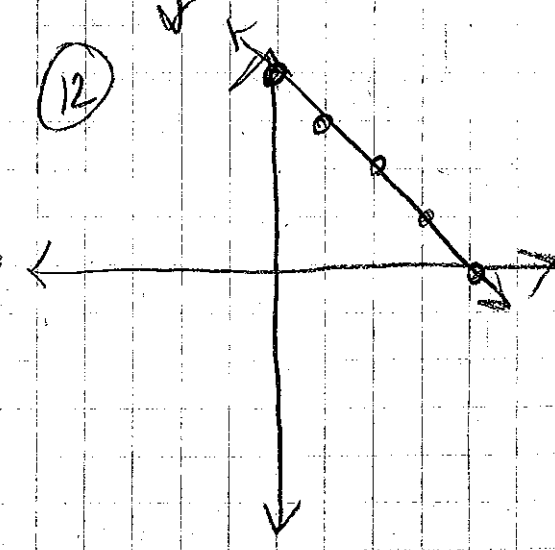
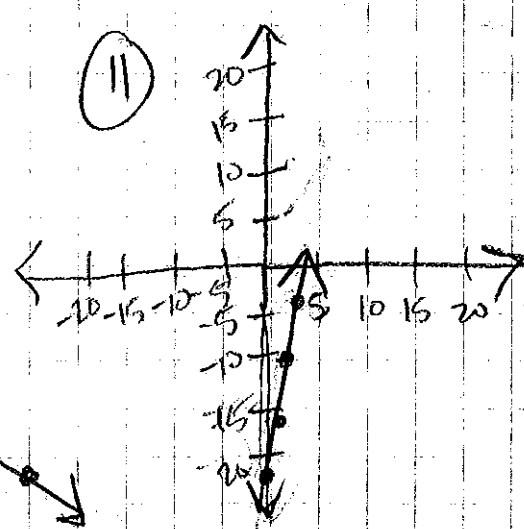
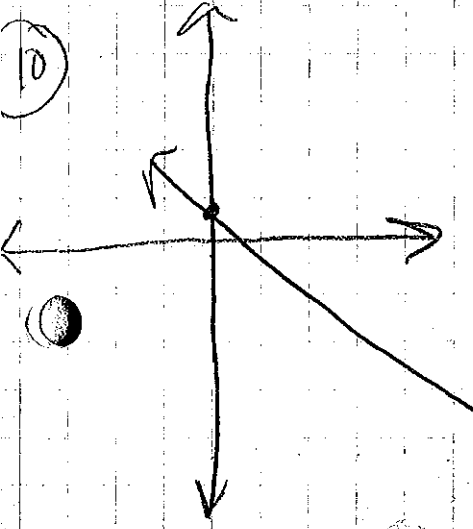
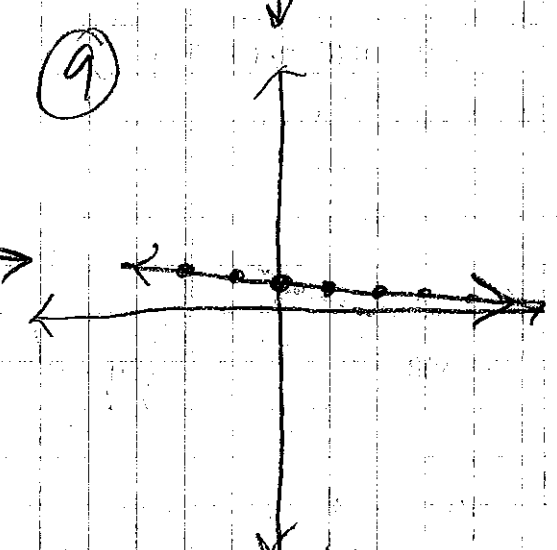
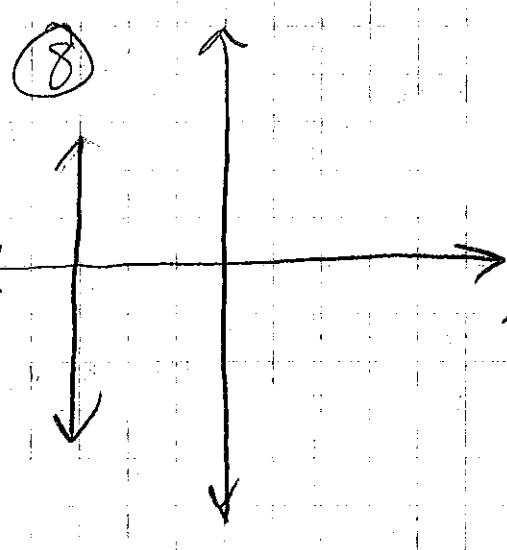
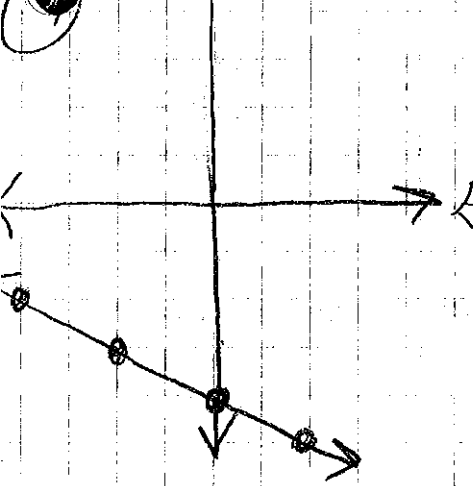
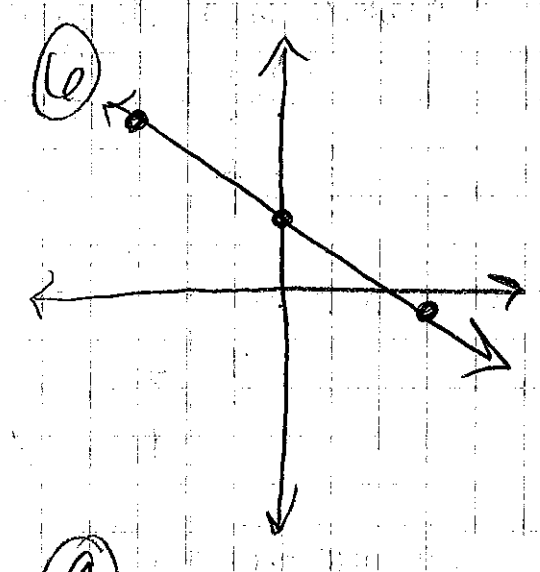
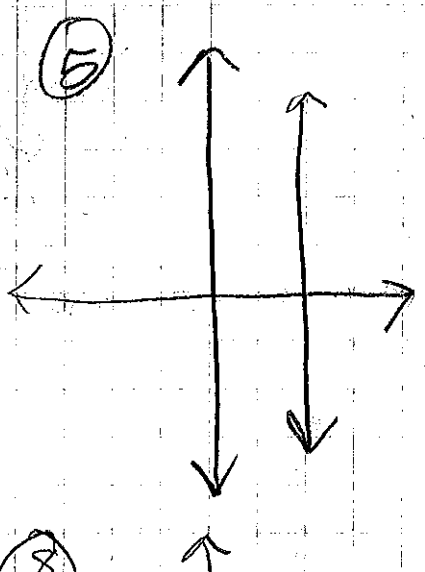
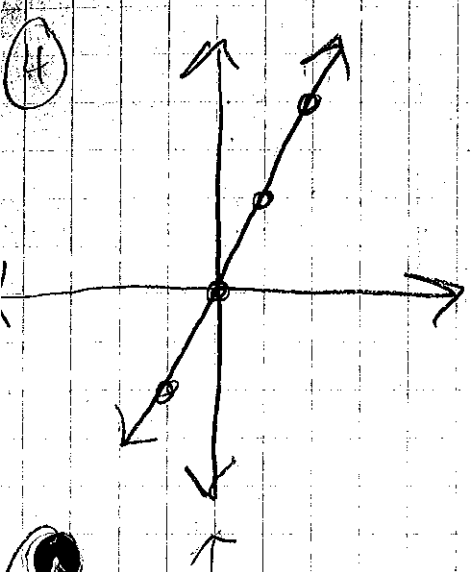
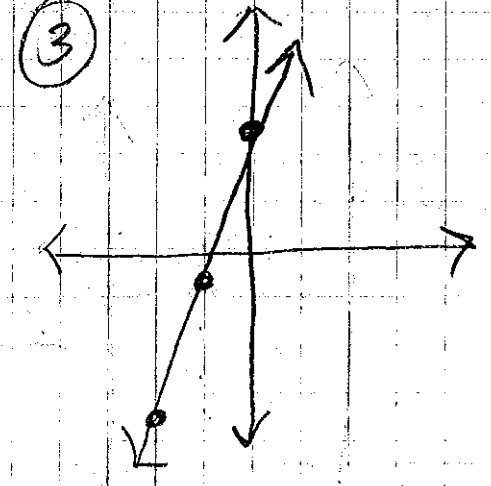
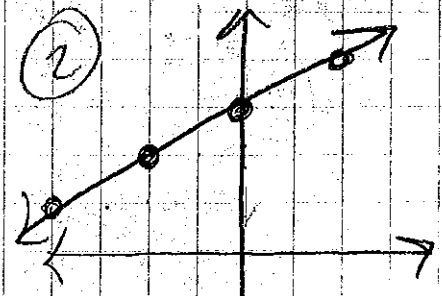
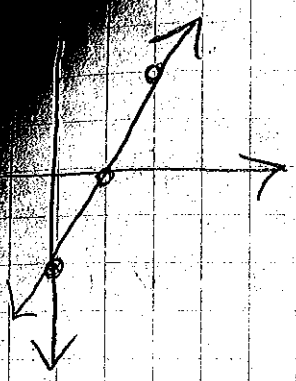
$0 = -4 + b$

$4 = b$

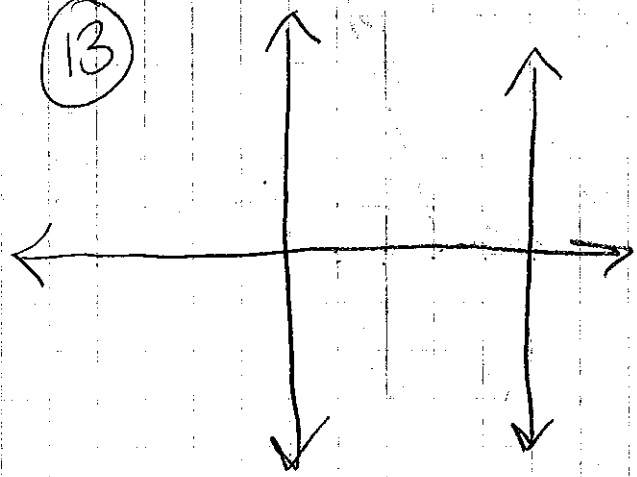
13.  $(5, 3) m = \text{undefined}$   
 $x = 5$

14.  $(5, 3) m = 0$

P.S.:  $y - 3 = 0(x - 5)$   
 S.I.:  $y = 3$



13



14

