# *Chapter 5 Review Packet*

**Write an equation of the line in <u>slope-intercept form</u> with the given slope and y-intercept.**

(1)  Slope: 3 ; y-intercept: (0,8)                    _____
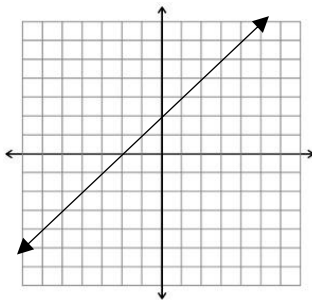
(2)  Slope: 11 ; y-intercept: (0,-2)                    _____

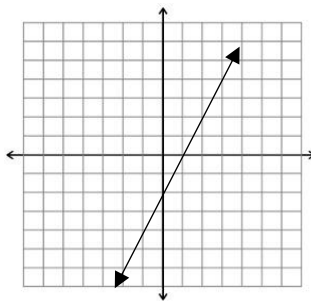(3)  Slope: $\frac{2}{5}$ ; y-intercept: (0,3)                    _____

(4)  Slope: -3 ; y-intercept: (0,-7)                    _____

**Write an equation for the line shown in <u>any form</u> that you choose.**

(5)



_____

(6)



_____

(7)



_____

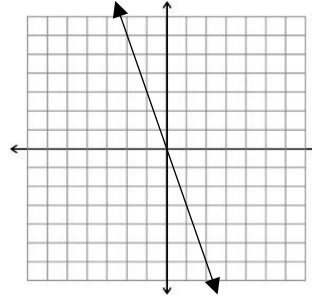**Write an equation of the line in <u>slope-intercept form</u> that passes through the given points.**

(8)  $(0, 5) (2, 11)$

(9) $(0, 1) (3, -5)$

(10) $(-5, 2) (0, -3)$

_____         _____         _____

**Write an equation in <u>point-slope form</u> of the line that passes through the given point and has slope m.**

(11) (2, 2); $m = 5$ 　　　　　　(12) (-1, 7); $m = 4$ 　　　　　　(13) (-8, –6); $m = 6$

**Write an equation in <u>point-slope form</u> of the line that passes through the given points.**

(14) (7, 2), (2, 12) 　　　　　　(15) (–4, –1), (6, -7) 　　　　　　(16) (–3, -20), (4, 36)

**Write an equation of the line in <u>slope-intercept form</u> that passes through the given point and has slope m.**

(17) (–1, 6); $m = 5$ 　　　　　　(18) (10, 3); $m = –2$ 　　　　　　(19) (5, –4); $m = \frac{1}{3}$

**Write an equation of the line <u>slope-intercept form</u> that passes through the given points.**

(20) (–10, 7), (5, –3) 　　　　　　(21) (–5, –3), (12, 17.4) 　　　　　　(22) (–8, 84), (5, –46)

**Convert the following equations to <u>standard form</u>.**

(23) $y + 2 = -\frac{1}{2}(x - 5)$

(24) $y - 1 = 3(x + 2)$

(25) $y + 1 = -\frac{1}{3}(x - 4)$

(26) $y - 2 = \frac{1}{2}(x + 4)$

(27) $y - 1 = -3(x - 2)$

(28) $y + 6 = -\frac{1}{2}(x - 7)$

**Write an equation in <u>slope-intercept form</u> of the line that passes through the given point and is <u>parallel</u> to the given line.**

(29) $(0, -3);\ y = 2x + 2$

(30) $(0, -1); y = -\frac{3}{5}x - 3$

(31) $(0, 5);\ 2y = 4x - 6$

**Write an equation in <u>slope-intercept form</u> of the line that passes through the given point and is <u>perpendicular</u> to the given line.**

(32) $(0, -3);\ y = x + 5$

(33) $(0, -4);\ y = -\frac{2}{7}x + 1$

(34) $(0, 4); y = \frac{5}{2}x + 3$