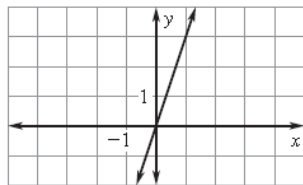
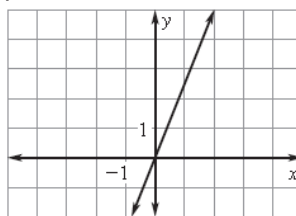


3. $y = 3x$ p.109/3-63 mult of 3



6. $y = 2.5x$



12. $y = \frac{5}{3}x; 20$

15. $y = \frac{1}{3}x; 4$

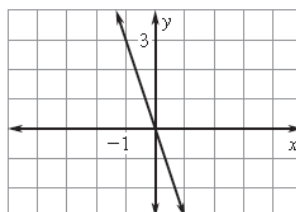
18. direct variation; -8

21. direct variation; 2.5

24. $y = -3x; \frac{4}{3}$

27. $y = -7x; \frac{4}{7}$

9. $y = -3x$



30. *Sample answer:* If you earn an hourly wage, the amount of money you earn varies directly with the number of hours you work. If you work 4 hours and make \$28, the equation relating the number of hours h worked and the amount of money m you earn is $m = 7h$. If you are traveling at a constant speed, the distance d you travel varies directly with the time t you travel. If you drive for 4 hours and travel 248 kilometers, the direct variation equation is $d = 62h$.

33. direct variation; $y = -4x$

36. $y = \frac{y_1}{x_1}x; y = -\frac{x_1}{y_1}x$

39. $w = 3600d; 6300 \text{ lb}$

42. 4, 8, 12, 16; 1, 4, 9, 16

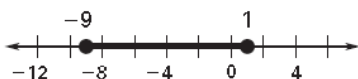
45. *Sample answer:* Let p be the price of a necklace, l be the length, w be the weight, and a and b be constants of variation. $p = al$ and $w = bl$, solve for l in terms of

$w, l = \frac{w}{b}$, and substitute into the other equation for l ,

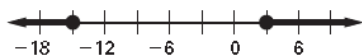
$p = a\left(\frac{w}{b}\right) = \frac{a}{b}w$. Since a and b are constants of variation, $\frac{a}{b}$ is

also a constant of variation relating p , the price, to w , the weight.

48. $-9 \leq x \leq 1$



51. $x \leq -15$ or $x \geq 3$



54. 3

57. $\frac{4}{3}$

