

6E

1) 3, 1

2) on the graph

3) 1, 3 $B = M + 3$

X	Y
0	2
1	3
2	4
3	5

5) on the graph

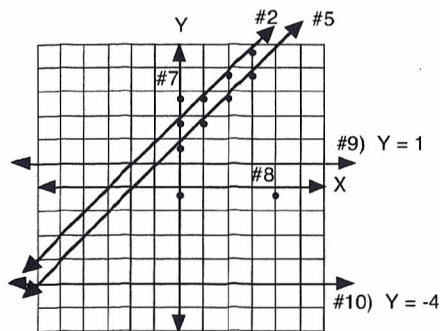
6) answers will vary

7) Y axis

8) X axis

9) on the graph

10) on the graph



$$11) \begin{aligned} 4AB - 7A &= 15A \\ A(4B - 7) &= A(15) \\ 4B - 7 &= 15, \quad 4B = 22, \quad B = 5 \frac{1}{2} \end{aligned}$$

$$12) \begin{aligned} 7(B + 6 - 2B - 4) &= 3^2(-4B - 8 - 9 + 2B) \\ 7(-B + 2) &= 9(-2B - 17) \\ -7B + 14 &= -18B - 153 \\ 11B + 14 &= -153, \quad 11B = -167, \quad B = -15 \frac{2}{11} \end{aligned}$$

$$13) \begin{aligned} -3(3G + 5G) + |3 - 12| &= 18G + 5(-G - 4) \\ -3(8G) + |-9| &= 18G - 5G - 20 \\ -24G + 9 &= 13G - 20 \\ -37G &= -29, \quad G = 29/37 \end{aligned}$$

$$14) \begin{aligned} 100(-1.2) + 100(.07X) &= 100(.3) \\ -120 + 7X &= 30 \\ 7X &= 150, \quad X = 21 \frac{3}{7} \text{ or } 21.43 \text{ (rounded)} \end{aligned}$$

$$15) \begin{aligned} \frac{4}{(40)} \frac{3}{10} - \frac{8}{(40)} \frac{8}{5} &= \frac{5}{(40)} \frac{-5}{8} M \\ 12 - 64 &= -25M, \quad -52 = -25M, \quad M = 2 \frac{2}{25} \end{aligned}$$

$$16) \begin{aligned} \frac{10}{(90)} \frac{5}{8} X - \frac{15}{(90)} \frac{17}{8} &= \frac{9}{(90)} \frac{7}{10} \\ 50X - 255 &= 63, \\ 50X &= 318, \quad X = 6 \frac{9}{25} \end{aligned}$$

$$17) \begin{array}{r} .285 \text{ rounds to } .29 \\ 7 \overline{) 2.000} \\ \underline{14} \\ 60 \\ \underline{56} \\ 40 \\ \underline{35} \\ 5 \end{array}$$

$$18) 35\% = .35 = \frac{35}{100} = \frac{7}{20}$$

$$19) (-N)(-4) \div (2 \cdot 5)$$

$$20) 3N - N + 2N + 7$$

7A

If your student text has lesson practice 7A.1 - 7A.4, and 7B.1 and 7B.2, look in Appendix A at the back of your student book for the solutions.

1) intercept

2) up: over

3) negative

$$4) \text{ negative; } m = \frac{6}{-2} = -3$$

$$5) \text{ positive; } m = \frac{8}{4} = 2$$

$$6) \text{ positive; } m = \frac{7}{7} = 1$$

$$7) \text{ negative; } m = \frac{6}{-3} = -2$$

$$8) \text{ negative; } m = \frac{3}{-3} = -1$$

$$9) \text{ positive; } m = \frac{3}{1} = 3$$

7B

1) 4

2) 3

3) slope

$$4) \text{ negative; } m = \frac{2}{-8} = -\frac{1}{4}$$

$$5) \text{ positive; } m = \frac{3}{5}$$

$$6) \text{ positive; } m = \frac{4}{6} = \frac{2}{3}$$

$$7) \text{ negative; } m = \frac{1}{-2} = -\frac{1}{2}$$

$$8) \text{ negative; } m = \frac{2}{-6} = -\frac{1}{3}$$

$$9) \text{ positive; } m = \frac{6}{8} = \frac{3}{4}$$

7C

1) -3

2) down

3) $m = \frac{6}{4} = \frac{3}{2}$; $b = -2$

4) $Y = \frac{3}{2}X - 2$

5) $m = \frac{1}{-3} = -\frac{1}{3}$; $b = 1$

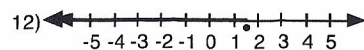
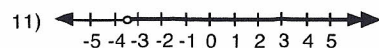
6) $Y = -\frac{1}{3}X + 1$

7) $m = \frac{3}{4}$; $b = 0$

8) $Y = \frac{3}{4}X$

9) $m = \frac{2}{4} = \frac{1}{2}$; $b = -1$

10) $Y = \frac{1}{2}X - 1$



13) $[(7 - 3) \times 4^2 - 9] \div 3^3 =$
 $[4 \times 16 - 9] \div 27 =$
 $(64 - 9) \div 27 =$
 $55 \div 27 = 2 \frac{1}{27}$

14) $|-4 - 2| + 8^2 - 7 \times 5 + 19 =$
 $|-6| + 16 - 35 + 19 =$
 $6 + 16 - 35 + 19 = 6$

15) $13^2 + 5 \div 10 =$
 $169 + (5 \div 10) =$
 $169 + (.5) = 169.5 \text{ or } 169 \frac{1}{2}$

16) $5(9 - 2) - 6(7) + 2^3 \cdot 3 =$
 $5(7) - 6(7) + (8 \cdot 3) =$
 $35 - 42 + 24 = 17$

17) $2X - 5 = -X + 13$
 $2X + X = 13 + 5$
 $3X = 18 \quad X = 6$

18) $Y + 14 - 3Y = 0$
 $Y - 3Y = -14$
 $-2Y = -14 \quad Y = 7$

19) $-3 \frac{1}{2}B + \frac{2}{3} = 5 \frac{1}{4} + \frac{5}{6}B$
 $12[-\frac{7}{2}B + \frac{2}{3}] = 12[2\frac{1}{4} + \frac{5}{6}B]$
 $-42B + 8 = 63 + 10B$
 $8 - 63 = 10B + 42B$
 $-55 = 52B \quad B = -1 \frac{3}{52}$

20) $2.7T + 1.09 = 5.3 - .6T$
 $100[2.7T + 1.09] = 100[5.3 - .6T]$
 $270T + 109 = 530 - 60T$
 $270T + 60T = 530 - 109$
 $330T = 421 \quad T = 330/421 \text{ or } 1 \frac{91}{330}$

7D

1) 4

2) 3

3) $m = \frac{3}{5}$; $b = 4$

4) $Y = -\frac{3}{5}X + 4$

5) $m = \frac{4}{-6} = -\frac{2}{3}$; $b = 0$

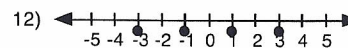
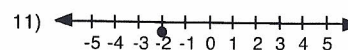
6) $Y = -\frac{2}{3}X$

7) $m = \frac{3}{-6} = -\frac{1}{2}$; $b = 1$

8) $Y = -\frac{1}{2}X + 1$

9) $m = \frac{6}{3} = 2$; $b = 3$

10) $Y = 2X + 3$



13) $-15 - 8| \times 4 - 7 + 12 =$
 $-1-3| \times 4 - 7 + 12 =$
 $(-3 \times 4) - 7 + 12 =$
 $-12 - 7 + 12 = -7$

14) $-7^2 \times 2 - 48 + 5 =$
 $(-49 \times 2) - 48 + 5 =$
 $-98 - 48 + 5 = -141$

15) $144 \div 9 \times 3 - |100 - 121| =$
 $(144 \div 9 \times 3) - | -21 | =$
 $(144 \div 9 \times 3) - 21 =$
 $(16 \times 3) - 21 = 27$

16) $8[17 - 3 \times 2] + 6^2 - (-5)^2 =$
 $8[17 - 6] + 36 - 25 =$
 $8(11) + 36 - 25 =$
 $88 + 36 - 25 = 99$

17) $4A + 11 = A - 4$
 $4A - A = -4 - 11$
 $3A = -15 \quad A = -5$

18) $-5F = -6F + 8$
 $-5F + 6F = 8$
 $F = 8$

19) $\frac{2}{5} - \frac{1}{6}D = -\frac{3}{4}$
 $60[\frac{2}{5} - \frac{1}{6}D] = 60[-\frac{3}{4}]$
 $24 - 10D = -45$
 $-10D = -45 - 24$
 $-10D = -69 \quad D = 69/10 \text{ or } 6 \frac{9}{10}$

20) $.03M - 1.2 = -.48M$
 $100[.03M - 1.2] = 100[-.48M]$
 $3M - 120 = -48M$
 $3M + 48M = 120$
 $51M = 120 \quad M = 120/51 = 40/17$
 $\text{or } M = 2 \frac{6}{17}$

7E

1) up

2) slope

$$3) m = \frac{2}{-5} = -\frac{2}{5}; b = 2$$

$$4) Y = -\frac{2}{5}X + 2$$

$$5) m = \frac{2}{-8} = -\frac{1}{4}; b = 3$$

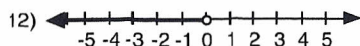
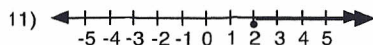
$$6) Y = -\frac{1}{4}X + 3$$

$$7) m = \frac{3}{3} = 1; b = -1$$

$$8) Y = X - 1$$

$$9) m = \frac{3}{-1} = -3; b = -2$$

$$10) Y = -3X - 2$$



$$13) 11 \cdot 3^2 - 14 \times 2 = \\ (11 \cdot 9) - (14 \times 2) = \\ (99) - (28) = 71$$

$$14) 2 \cdot 7 + 4^2 - 15 = \\ (2 \cdot 7) + 16 - 15 = \\ 14 + 16 - 15 = 15$$

$$15) (-6)^2 + (8 - 3^2) = \\ 36 + (8 - 9) = \\ 36 + (-1) = 35$$

$$16) 16 \div 8 \cdot 5 - 14 = \\ 2 \cdot 5 - 14 = \\ 10 - 14 = -4$$

$$17) -2B + 5 - 3 + B = B - 4B + 1 - 10 \\ -2B + B + 5 - 3 = B - 4B + 1 - 10 \\ -B + 2 = -3B - 9 \\ -B + 3B = -9 - 2 \\ -2B = -11 \quad B = 11/2 \text{ or } 5 \frac{1}{2}$$

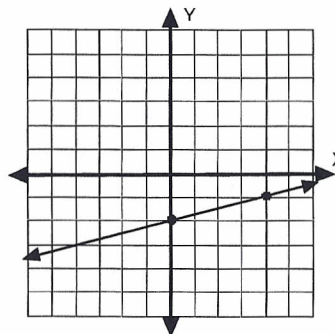
$$18) 5K + 6 - K - 9 = -2K + 6 + 3K - 3 \\ 5K - K + 6 - 9 = -2K + 3K + 6 - 3 \\ 4K - 3 = K + 3 \\ 4K - K = 3 + 3 \\ 3K = 6 \quad K = 2$$

$$19) 4 \frac{3}{10} = -\frac{2}{3} + \frac{8}{9}G \\ 90(4 \frac{3}{10}) = 90(-\frac{2}{3} + \frac{8}{9}G) \\ 387 = -60 + 80G \\ 387 + 60 = 80G \\ 447 = 80G \quad 447/80 = G \\ G = 447/80 = 5 \frac{47}{80}$$

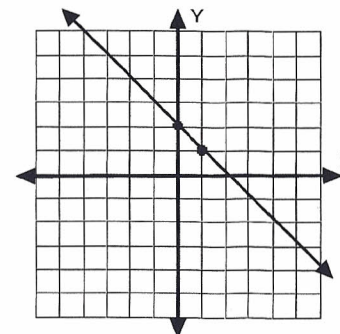
$$20) -5 - .6R = -9.8 \\ 10(-5 - .6R) = 10(-9.8) \\ -50 - 6R = -98 \\ -6R = -98 + 50 \\ -6R = -48 \quad R = 8$$

8A

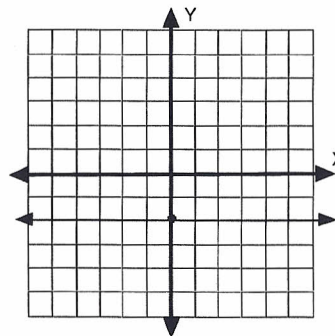
$$1) Y = \frac{1}{4}X - 2, m = \frac{1}{4}, b = -2$$



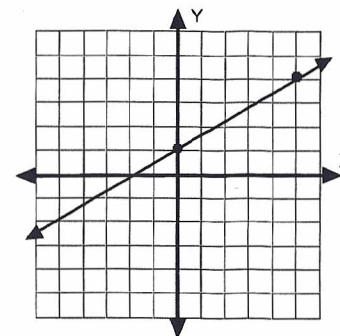
$$2) Y = -X + 2, m = -1, b = 2$$



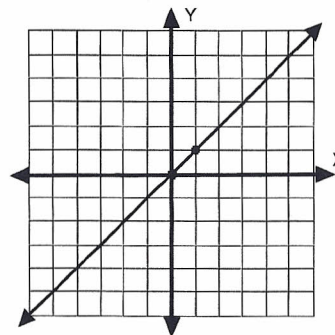
$$3) Y = -2; Y = 0X - 2, m = 0, b = -2$$



$$4) Y = \frac{3}{5}X + 1, m = \frac{3}{5}, b = 1$$



$$5) Y = X; Y = X + 0, m = 1, b = 0$$



$$6) X = -3, m = \text{undefined}, b = \text{none or undefined}$$

