

7E

1) up

2) slope

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

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

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

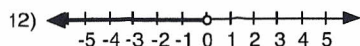
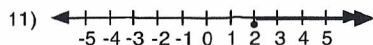
$$6) Y = -\frac{1}{4}X + 3$$

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

$$8) Y = X - 1$$

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

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



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

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

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

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

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

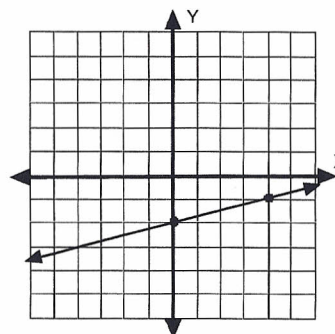
$$18) 5K + 6 - K - 9 = -2K + 6 + 3K - 3 \\ 5K - K + 6 - 9 = -2K + 3K + 6 - 3 \\ 4K - 3 = K + 3 \\ 4K - K = 3 + 3 \\ 3K = 6 \quad K = 2$$

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

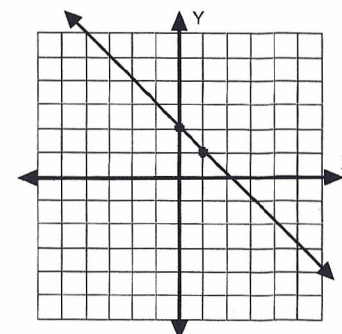
$$20) -5 - .6R = -9.8 \\ 10(-5 - .6R) = 10(-9.8) \\ -50 - 6R = -98 \\ -6R = -98 + 50 \\ -6R = -48 \quad R = 8$$

8A

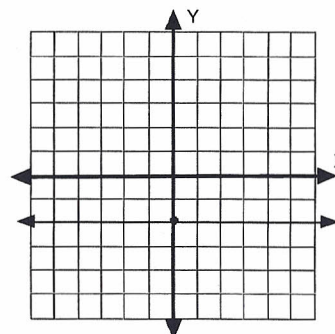
$$1) Y = \frac{1}{4}X - 2, m = \frac{1}{4}, b = -2$$



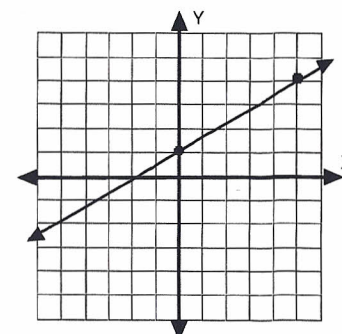
$$2) Y = -X + 2, m = -1, b = 2$$



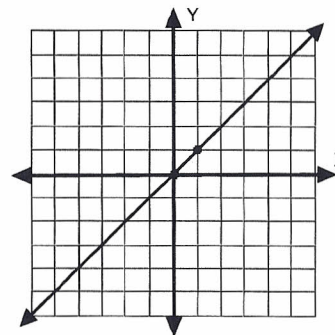
$$3) Y = -2; Y = 0X - 2, m = 0, b = -2$$



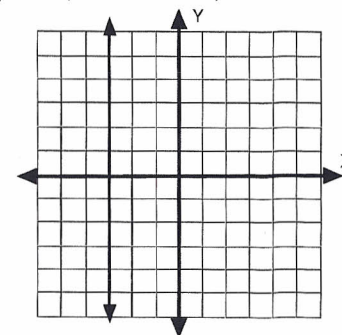
$$4) Y = \frac{3}{5}X + 1, m = \frac{3}{5}, b = 1$$



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

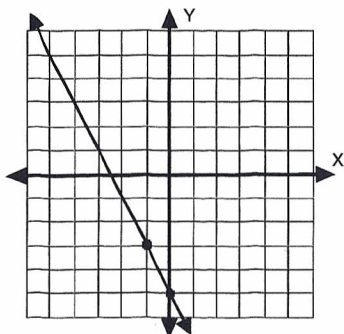


$$6) X = -3, m = \text{undefined}, b = \text{none or undefined}$$

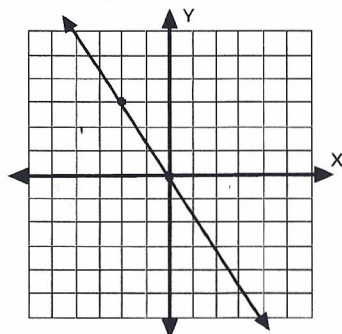


8B

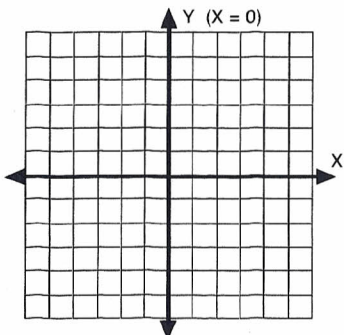
1) $Y = -2X - 5$, $m = -2$, $b = -5$



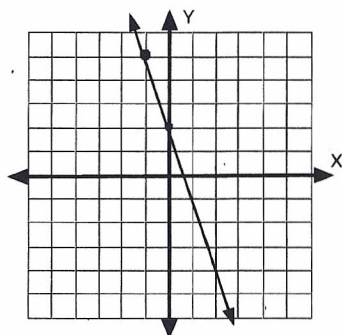
2) $Y = -3/2 X$; $Y = -3/2 X + 0$, $m = -3/2$, $b = 0$



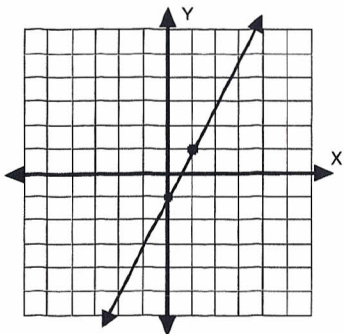
3) $X = 0$, $m = \text{undefined}$, $b = \text{none or undefined}$;
graph is Y-axis



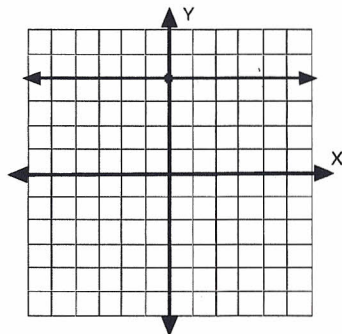
4) $Y = -3X + 2$, $m = -3$, $b = 2$



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



6) $Y = 4$; $Y = 0X + 4$, $m = 0$, $b = 4$



8C

days	dollars
0	-4
1	-5
2	-6
3	-7

2) on the graph

3) -1, 4
 $\$ = -D - 4$

4) 0, 2

days	money
0	0
1	-2
2	-4
3	-6

5) on the graph

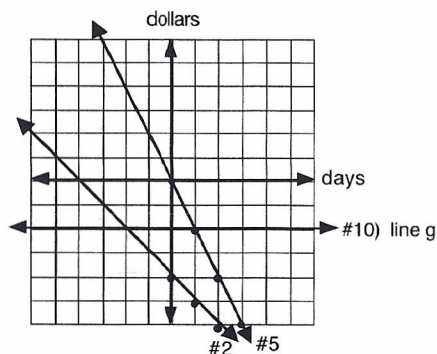
6) -2, 0

7) slope = 4, intercept = 2

8) $Y = 4X + 2$

9) quadrants 1, 2, 3

10) on the graph



11) $6R - 90R = 70$
 $-30R = 70$, $R = -2 \frac{1}{3}$

12) $-18 + 54X = 27$
 $9(-2 + 6X) = 9(3)$
 $-2 + 6X = 3$, $6X = 5$, $X = 5/6$

13) $[(6 + 5)^2 - 1] \div 12 = 3X + |-2X|$
 $(11^2 - 1) \div 12 = 3X + 2X$
 $120 \div 12 = 5X$, $10 = 5X$, $2 = X$

14) $4B - 32B = 36B - 8BY$
 $4B(1 - 8) = 4B(9 - 2Y)$
 $-7 = 9 - 2Y$, $-16 = -2Y$, $8 = Y$

15) $100(1.03) - 100(.8Y) = 100(5)$
 $103 - 80Y = 500$
 $-80Y = 397$, $Y = -4 \frac{77}{80}$ or 4.9625

16) $\frac{15}{(60)} \frac{15}{A} Y = \frac{12}{(60)} \frac{11}{B} + \frac{10}{(60)} \frac{23}{C}$
 $225Y = 132 + 230$
 $225Y = 362$, $Y = 1 \frac{137}{225}$

17) $5X - 20 = 50X + 35$
 $-55 = 45X$, $X = -1 \frac{2}{9}$

18) $\frac{6}{(60)} \frac{3}{10} X - \frac{10}{(60)} \frac{19}{8} X = \frac{15}{(60)} \frac{17}{A}$
 $18X - 190X = 255$, $X = -1 \frac{83}{172}$

19) $WF \times 7 = 5$

$$\frac{WF}{7} \times 7 = \frac{5}{7}$$

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

20) $WF \times 5 = 2$

$$\frac{WF}{5} \times 5 = \frac{2}{5}$$

$$WF = \frac{2}{5}$$

8D

days	dollars
0	-3
1	-5
2	-7
3	-9

2) on the graph

3) -2, 3
\$ = -2D - 3

4) 2, 3

days	dollars
0	2
1	5
2	8
3	11

5) on the graph

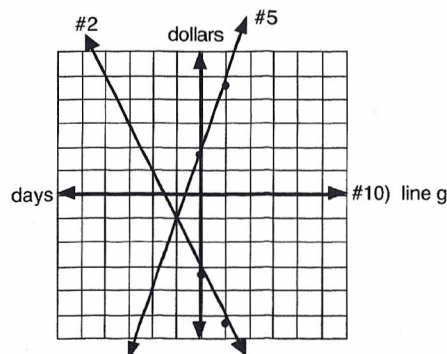
6) 3, 2

7) slope = -1, intercept = 0

8) Y = -X

9) quadrants 2, 4

10) on the graph



$$11) 12Y = 6 - 24 \\ 12Y = -18, \quad Y = -1 \frac{1}{2}$$

$$12) -72 + 60F = 48 \\ 60F = 120, \quad F = 2$$

$$13) 2^2 [5(4 - 2X + 3) - 3(8 + 9X - 4X)] = 0 \\ 4[5(7 - 2X) - 3(8 + 5X)] = 0 \\ 4[35 - 10X - 24 - 15X] = 0 \\ 4(11 - 25X) = 0 \\ 44 - 100X = 0, \quad 44 = 100X, \quad 11/25 = X$$

$$14) -50BY + 30B = 80BY - 40B \\ 10B(-5Y + 3) = 10B(8Y - 4) \\ -5Y + 3 = 8Y - 4, \quad 7 = 13Y, \quad 7/13 = Y$$

$$15) 1000(.018) = 1000(.25Q) + 1000(2.04) \\ 18 = 250Q + 2040 \\ -2022 = 250Q, \quad -8 \frac{11}{125} = Q$$

$$16) \frac{3}{(24)} \frac{-13}{8} M + \frac{8}{(24)} \frac{13}{3} = \frac{4}{(24)} \frac{7}{8} \\ -39M + 104 = 28, \\ 76 = 39M, \quad 1 \frac{37}{39} = M$$

$$17) 10(-1.3) + 10(2.6) = 10(5.2X) \\ -13 + 26 = 52X \\ 13 = 52X, \quad 1/4 = X$$

$$18) \frac{6}{(30)} \frac{7}{8} Y = \frac{5}{(30)} \frac{25}{8} - \frac{10}{(30)} \frac{7}{3} \\ 42Y = 125 - 70, \quad Y = 1 \frac{13}{42}$$

$$19) 3N - N + 2N + 7$$

$$20) WF \times 4 = 3$$

$$\frac{WF}{4} \times 4 = \frac{3}{4} \\ WF = \frac{3}{4}$$

8E

days	dollars
0	-4
1	-1
2	2
3	5

2) on the graph

3) 3, 4
\$ = 3D - 4 or M = 3D - 4

4) -3, 1

days	dollars
0	-3
1	-2
2	-1
3	0

5) on the graph

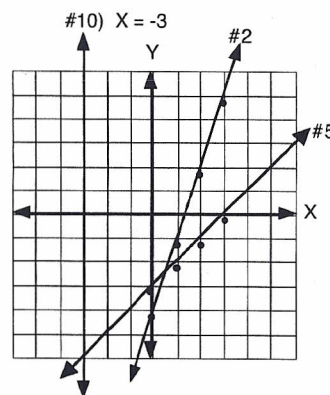
6) 1, -3

7) slope = -3, y-intercept = 2

8) Y = -3X + 2

9) quadrants 1, 2, 4

10) on the graph



$$11) -9Q - 24Q + 15 = 0 \\ 3(-3Q - 8Q + 5) = 3(0) \\ -3Q - 8Q + 5 = 0 \\ -11Q = -5, \quad Q = 5/11$$

$$12) 66 + 99A - 77 = 0 \\ 11(6 + 9A - 7) = 11(0) \\ 6 + 9A - 7 = 0 \\ 9A - 1 = 0, \quad 9A = 1, \quad A = 1/9$$

$$13) 2X(3 - 7 + 4 - 8 - 1) - 4^2 = (-4) \\ 2X(-9) - 16 = -4 \\ -18X = 12, \quad X = -2/3$$

$$14) 12 + 28 = -20B \\ 40 = -20B \\ -2 = B$$

$$15) 10(4D) - 10(.3D) = 10(18.5) \\ 40D - 3D = 185 \\ 37D = 185, \quad D = 5$$

$$16) \frac{35}{(20)} \frac{13}{2} = \frac{10}{(20)} \frac{5}{2} N - \frac{14}{(20)} \frac{-13}{8} N \\ 455 = 50N - 182N, \\ 455 = -132N, \quad N = -3 \frac{59}{132}$$

$$17) -12 = -2A - 6 \\ -6 = -2A, \quad 3 = A$$

$$18) \frac{20}{(40)} \frac{-11}{2} X + \frac{5}{(40)} \frac{19}{8} = \frac{4}{(40)} \frac{9}{10} \\ -220X + 95 = 36 \\ -220X = -59, \quad X = 59/220$$

$$19) (N + 1)(N - 4)$$

$$20) WF \times 9 = 7$$

$$\frac{WF}{9} \times 9 = \frac{7}{9} \\ WF = \frac{7}{9}$$