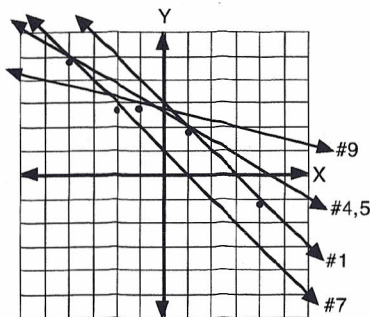


11E

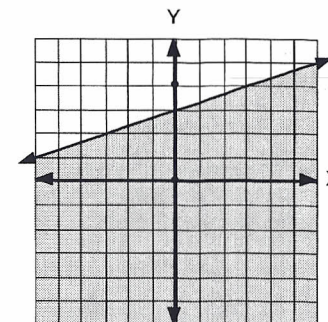
- 1) on the graph
- 2) $(-1) = -1(4) + b$
 $b = 3$
- 3) $Y = -X + 3$, $X + Y = 3$
- 4) $\frac{5 - 2}{-4 - 1} = \frac{3}{-5} = -\frac{3}{5}$ (see graph)
- 5) (see graph) $(2) = -3/5(1) + b$, $b = 2 \frac{3}{5}$
- 6) $Y = -3/5 X + 2 \frac{3}{5}$, $3X + 5Y = 13$



- 7) on the graph (slope must be -1)
- 8) $(3) = -1(-2) + b$, $b = 1$
 $Y = -X + 1$, $X + Y = 1$
- 9) on the graph (slope must be $-1/4$)
- 10) $(3) = -1/4(-1) + b$, $b = 2 \frac{3}{4}$
 $Y = -1/4 X + 2 \frac{3}{4}$, $X + 4Y = 11$
- 11) $(-1)(2)(-3)(4)(-5)^2 = -\{-(-X)\}$
 $(-2)(-12)(25) = X$, $(24)(25) = X$, $X = 600$
- 12) $(72A - 84A = 36AF) \div 12A$
 $6 - 7 = 3F$, $F = -1/3$
- 13) $10(-4.2Q) - 10(1.8Q) = 10(-6)$
 $-42Q - 18Q = -60$, $Q = 1$
- 14) $1000(.14) - 1000(.023) = 1000(.07C)$
 $140 - 23 = 70C$, $1 \frac{47}{70} = C$
- 15) $\frac{2}{5}$ $2 \div 5 = .4 = 40\%$
- 16) $\frac{3}{5}$ $3 \div 5 = .6 = 60\%$
- 17) $.4 \times 500 = 200$ g
- 18) $500 - 200 = 300$ g
- 19) $5,280 \times 4.5 = 23,760$ ft.
- 20) $1 \text{ yd.} = 3 \text{ ft.}$ $5,280 \div 3 = 1,760$ yds.

12A

- 1) $Y = 1/3 X + 3$ see graph
- 2) solid
- 3) $(0, 0)$ $3(0) \leq (0) + 9$, $0 \leq 9$ true
 $(0, 4)$ $3(4) \leq (0) + 9$, $12 \leq 9$ false
(You may choose any points you wish as long as they are on opposite sides of the line)

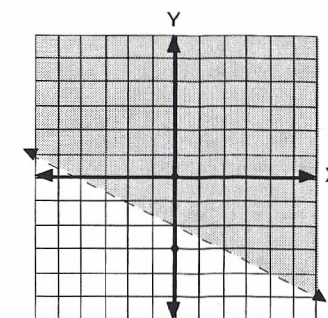


- 4) see graph

- 5) $Y = -1/2 X - 2$ see graph

- 6) dotted

- 7) $(0, 0)$ $2(0) > -(0) - 4$, $0 > -4$ true
 $(0, -3)$ $2(-3) > -(0) - 4$, $-6 > -4$ false

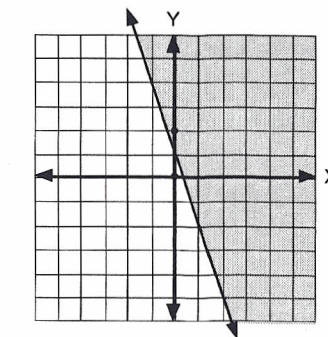


- 8) see graph

- 9) $Y = -3X + 1$ see graph

- 10) solid

- 11) $(0, 0)$ $3(0) + (0) \geq 1$, $0 \geq 1$ false
 $(0, 2)$ $3(0) + (2) \geq 1$, $2 \geq 1$ true



- 12) see graph

- 13) $Y > -X - 2$

- 14) $-2Y < -4X + 6$
 $Y > 2X - 3$

- 15) $-4Y \geq 8X + 8$
 $Y \leq -2X - 2$

12B

1) $Y = 2X - 3$ see graph

2) solid

3) $(0, 0)$ $-2(0) + (0) \leq -3$, $0 \leq -3$ false
 $(3, 0)$ $-2(3) + (0) \leq -3$, $-6 \leq -3$ true

(You may choose any points you wish as long as they are on opposite sides of the line)

4) see graph

5) $Y = 2/3 X - 3$ see graph

6) solid

7) $(0, 0)$ $3(0) \leq 2(0) - 9$, $0 \leq -9$ false
 $(0, -4)$ $3(-4) \leq 2(0) - 9$, $-12 \leq -9$ true

8) see graph

9) $Y = 1/5 X + 1$ see graph

10) dotted

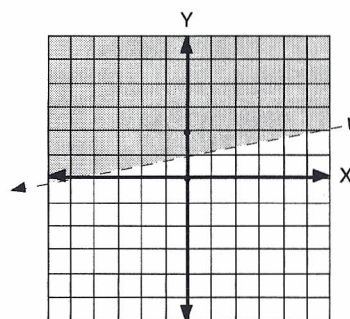
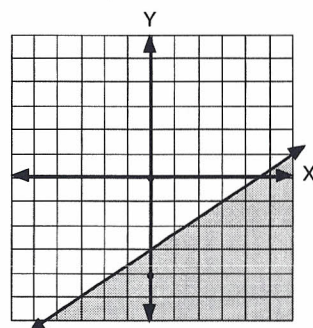
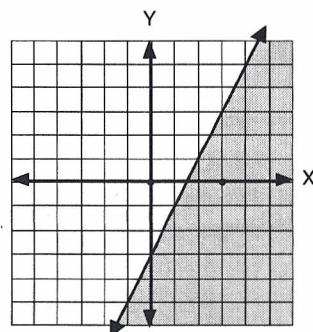
11) $(0, 0)$ $-(0) + 5(0) > 5$, $5 > 5$ false
 $(0, 2)$ $-(0) + 5(2) > 5$, $10 > 5$ true

12) see graph

13) $Y < 3X - 5$

14) $-Y > -3X + 5$
 $Y < 3X - 5$

15) multiplying or dividing by a negative number



12C

1) on the graph

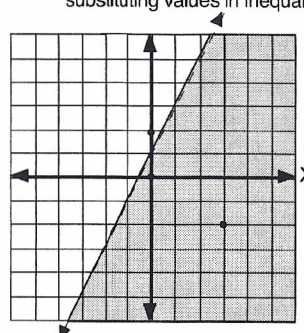
2) dotted

For next step, change $-Y > -2X - 1$ to $Y < 2X + 1$

3) $(0, 0)$ $(0) < 2(0) + 1$, $0 < 1$ true
 $(0, 2)$ $(2) < 2(0) + 1$, $2 < 1$ false

4) on the graph

5) yes (determine by plotting on graph or substituting values in inequality)



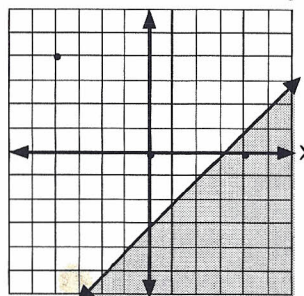
6) on the graph

7) solid

8) $(0, 0)$ $(0) \leq (0) - 3$, $0 \leq -3$ false
 $(4, 0)$ $(0) \leq (4) - 3$, $0 \leq 1$ true

9) on the graph

10) multiplying or dividing by a negative number



11) $WF \times 16 = 1$, $WF = 1/16$

12) $WF \times 2000 = 1$, $WF = 1/2000$

13) $-2Y = -3X + 5$, $Y = 3/2 X - 5/2$

14) slope = $3/2$

15) slope = $-2/3$ *3/2 okay -2/3*

16) Y intercept is -2, $Y = 2X - 2$ or $2X - Y = 2$

17) $.16 \times 242 = 38.72$

18) quadrant 3

19) $\frac{1}{1.6} = \frac{10}{?}$ $(?)(1) = (1.6)(10)$, $? = 16$ km

20) $\frac{1}{1.6} = \frac{?}{10}$ $(1)(10) = (1.6)(?)$, $? = 6.25$ mi.

12D

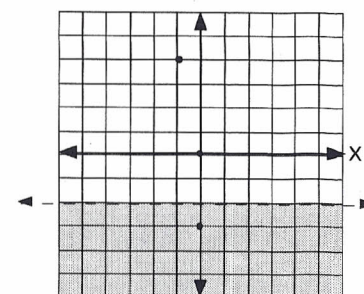
1) on the graph ($Y = -2$)

2) dotted

3) $(0, 0)$ $(0) + 2 < 0$, $2 < 0$ false
 $(0, -3)$ $(-3) + 2 < 0$, $-1 < 0$ true

4) on the graph

5) $4Y < -8$, $Y < -2$

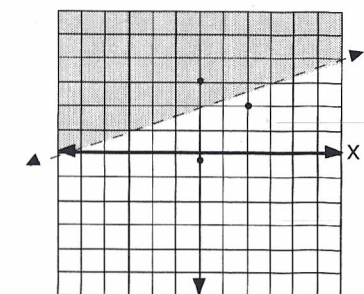
6) on the graph ($Y = 1/3 X + 2$)

7) dotted

8) $(0, 0)$ $(0) - 3 > 1/3(0) - 1$, $-3 > -1$ false
 $(0, 3)$ $(3) - 3 > 1/3(0) - 1$, $0 > -1$ true

9) on the graph

10) $Y < 2X - 1$



11) $WF \times 60 = 1$, $WF = 1/60$

12) $WF \times 7 = 1$, $WF = 1/7 \approx .14 = 14\%$

13) $\frac{1}{.45} = \frac{10}{X}$ $(1)(X) = (.45)(10)$, $X = 4.5$ kg

14) $\frac{1}{.45} = \frac{X}{2}$ $(1)(2) = (.45)(X)$, $X = 4 \frac{4}{9}$ lbs.

15) $Y = 2/3 X + 1/2$, $m = 2/3$

16) slope = $-3/2$

17) $(1) = -1/2(1) + b$, $b = 3/2$
 $Y = -1/2 X + 3/2$ or $X + 2Y = 3$

18) $9 \div 25 = .36 = 36\%$

19) $6N - 5N + 8$

20) $6(10) - 5(10) + 8 = 60 - 50 + 8 = 18$

12E

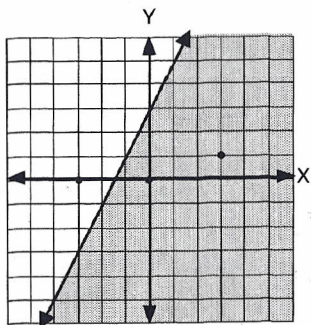
1) on the graph

2) solid

3) $(0, 0)$ $(0) \leq 2(0) + 3$, $0 \leq 3$ true
 $(-3, 0)$ $(0) \leq 2(-3) + 3$, $0 \leq -3$ false

4) on the graph

5) yes



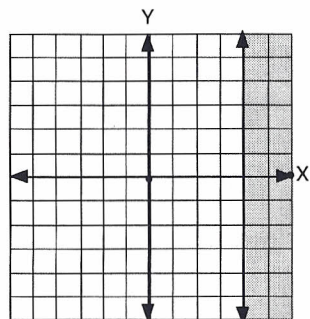
6) on the graph

7) solid

8) $(0, 0)$ $(0) \geq 4$ false
 $(6, 0)$ $(6) \geq 4$ true

9) on the graph

10) multiplying or dividing by a negative number



11) $WF \times 8 = 1$, $WF = 1/8$

12) $WF \times 4 = 1$, $WF = 1/4 = .25 = 25\%$

13) $\frac{1}{.95} = \frac{4 \text{ qt.}}{X}$
 $(1)(X) = (.95)(4)$, $X = 3.8$ liters

14) $\frac{1}{.95} = \frac{X}{1}$
 $(1)(1) = (.95)(X)$, $X = 1 \frac{1}{19}$ liter or 1.05 liter (rounded)

15) $Y = 2X + 32$, $m = 2$

16) $m = -1/2$

17) $(-4) = 3(-3) + b$, $b = 5$
 $Y = 3X + 5$ or $3X - Y = -5$

18) $12 \div 17 = .705... = .71$ (rounded) = 71%

19) $.17 \times 425 = 72.25$

20) quadrant 4

13A

1) on the graph

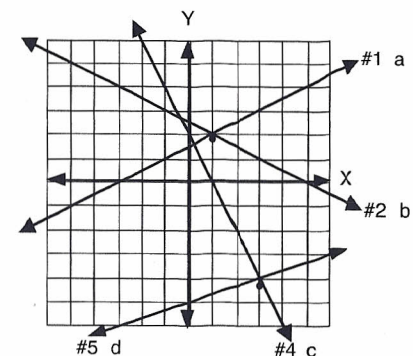
2) on the graph

3) $(1, 2)$

4) on the graph

5) on the graph

6) $(3, -4)$



7) on the graph

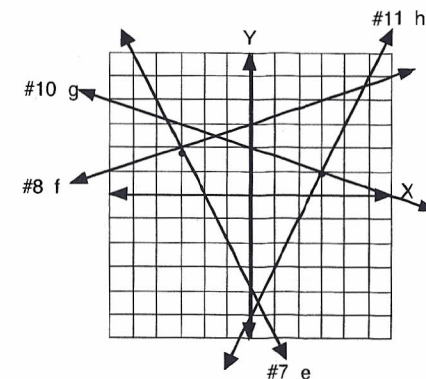
8) on the graph

9) $(-3, 2)$

10) on the graph

11) on the graph

12) $(3, 1)$



13) on the graph

14) on the graph

15) $(1, 1)$

16) on the graph

17) on the graph

18) $(-1, -3)$

