

9A-1

- 1) a) $m = 5/3$, $b = 5$, $Y = 5/3 X + 5$
 b) $m = 5/3$, $b = 1$, $Y = 5/3 X + 1$
 c) $m = 5/3$, $b = -1$, $Y = 5/3 X - 1$
 d) $m = 5/3$, $b = -4$, $Y = 5/3 X - 4$

- 2) w) $m = -1/2$, $b = 4$, $Y = -1/2 X + 4$
 x) $m = -1/2$, $b = 2$, $Y = -1/2 X + 2$
 y) $m = -1/2$, $b = -1$, $Y = -1/2 X - 1$
 z) $m = -1/2$, $b = -3$, $Y = -1/2 X - 3$

- 3) A) $Y = 1/3 X - 2$
 B) $Y = -3X$
 C) $Y = 4 - 3X$; $Y = -3X + 4$

Lines B and C both have a slope of -3 , which is the same slope as $Y = -3X + 2$.
Answers B and C are parallel to the given line.

- 4) A) $Y = 1/4 X + 5$
 B) $Y = -1/2 X + 2$
 C) $Y = 4 + 4/8 X$; $Y = 1/2 X + 4$

Line C has a reduced slope of $1/2$, which is the same slope as $Y = 1/2 X - 5$.
Answer C is parallel to the given line.

- 5) A) $Y = 2/3 X + 4$
 B) $Y = 6/4 X$; $Y = 3/2 X$
 C) $2Y = 8 - 3X$; $2Y = -3X + 8$, $Y = -3/2 X + 4$

Given line: $2Y - 3X = 4$; $2Y = 3X + 4$; $Y = 3/2 X + 2$
 Line B has a reduced slope of $3/2$, which is the same slope as $Y = 3/2 X + 2$.
Answer B is parallel to the given line.

- 6) A) $Y = 12/9 X - 1$; $Y = 4/3 X - 1$
 B) $3Y = -4X + 0$; $Y = -4/3 X$
 C) $-2Y = 5X - 8$; $Y = -5/2 X + 4$

Given line: $3Y + 4X = -6$; $3Y = -4X - 6$; $Y = -4/3 X - 2$
 Line B has a slope of $-4/3$, which is the same slope as $Y = -4/3 X - 2$.
Answer B is parallel to the given line.

9A-2

7) $-Y + 2X = 4$
 $-Y = -2X + 4$
 $Y = 2X - 4$

12) $Y = -5/3 X - 2$
 $5/3 X + Y = -2$ Adding $5/3 X$ to both sides.
 $5X + 3Y = -6$ Multiplying each term by 3.

8) $Y - 4X = 0$
 $Y = 4X + 0$
 $Y = 4X$

13) $Y = 4X - 3$
 $-4X + Y = -3$ or
 $4X - Y = 3$ Multiplying each term by -1 .

9) $-2Y - X = -2$
 $-2Y = X - 2$
 $Y = -1/2 X + 1$

14) $Y = 1/4 X + 3$
 $-1/4 X + Y = 3$
 $-X + 4Y = 12$ or $X - 4Y = -12$

10) $3Y - 2X = -6$
 $3Y = 2X - 6$
 $Y = 2/3 X - 2$

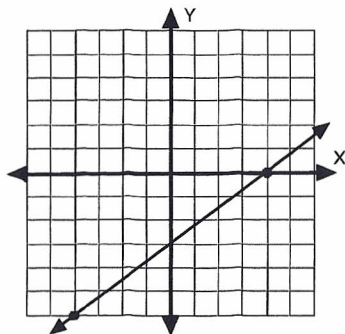
15) $Y = -3/5 X - 1$
 $3/5 X + Y = -1$
 $3X + 5Y = -5$

11) $-4Y - 3X = -8$
 $-4Y = 3X - 8$
 $Y = -3/4 X + 2$

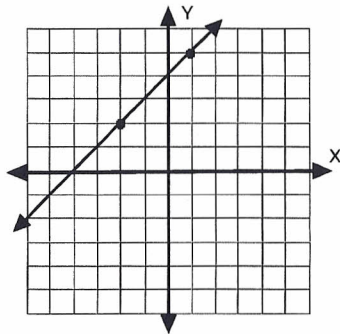
16) $Y = 3X$
 $-3X + Y = 0$ or $3X - Y = 0$

9B - 1

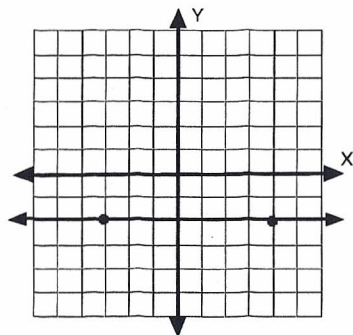
1) $Y = 6/8 X - 3$; $Y = 3/4 X - 3$



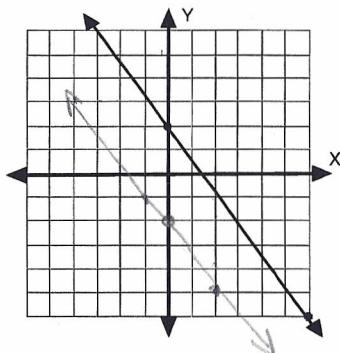
2) $Y = 3/3 X + 4$; $Y = X + 4$



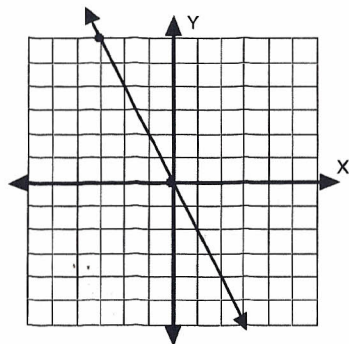
3) slope-intercept: $Y = 0X - 2$; $Y = -2$
standard form: $Y = -2$



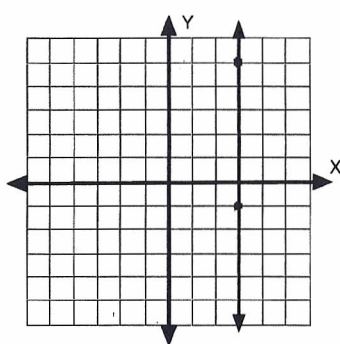
4) slope-intercept: $Y = -8/6 X + 2$; $Y = -4/3 X + 2$
standard form: $4/3 X + Y = 2$; $4X + 3Y = 6$



5) slope-intercept: $Y = -6/3 X + 0$; $Y = -2X$
standard form: $2X + Y = 0$



6) slope-intercept: none because slope is undefined and there is no Y-intercept.
standard form: $X = 0$



9B - 2

If your student text has Lesson Practice 8A.1 - 8A.3, look in Appendix A at the back of your student book for the solutions. If your student text has only 34 lessons, your lesson practice 8B is the same as 9B-2 in these solutions. Add one to each lesson number from here on to find the correct solutions.

7) on the graph

15) on the graph

8) slope = $-\frac{3}{2}$

16) slope = $\frac{8}{2} = 4$

9) y-intercept = 3

17) y-intercept = -1

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

18) $Y = 4X - 1$

11) C ($Y = -3/2 X$)

19) C ($Y = 3/2 X + 1$)

12) on the graph

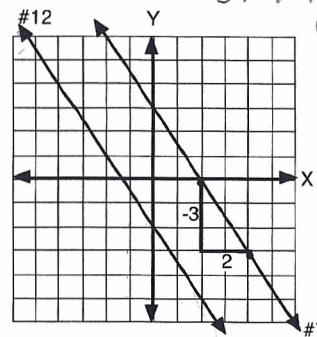
20) on the graph

13) $Y = -3/2 X - 2$

$Y = \frac{4}{3}x - 2$

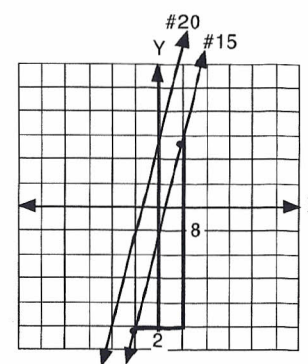
14) $Y + 3/2 X = -2$, $3X + 2Y = -4$

Mistake $-3Y + 4X = 12$
 $4X - 3Y = 2$



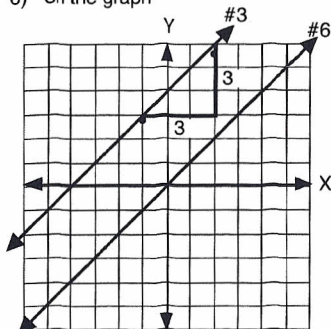
21) $Y = 4X + 3$

22) $4X - Y = -3$



9C

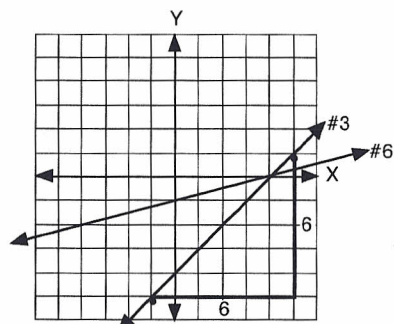
- 1) on the graph
- 2) slope = $\frac{3}{3} = 1$
- 3) y-intercept = 4
- 4) $Y = X + 4$, $X - Y = -4$
- 5) A ($Y = -X - 1$), C ($Y = -X$)
- 6) on the graph



- 7) 2
- 8) $Y = -3X - 1$, so slope is -3
- 9) $Y - 1/3 X = 2$, $X - 3Y = -6$
- 10) $2Y = -3X + 1$, $Y = -3/2 X + 1/2$
- 11) $(3 - 11)^2 \times 2 \div 16 - 7 = 3Y - 4Y + 9$
 $(-8)^2 \times 2 \div 16 - 7 = -Y + 9$
 $64 \times 2 \div 16 - 7 - 9 = -Y$
 $128 \div 16 - 16 = -Y$, $8 - 16 = -Y$, $8 = Y$
- 12) $(3 - 5)^2 + |6 - 4| - X = 3X$
 $(-2)^2 + |2| - X = 3X$
 $4 + 2 = 4X$, $6 = 4X$, $1\frac{1}{2} = X$
- 13) $3(A - 4) - 5(2A - 6) = 21$
 $3A - 12 - 10A + 30 = 21$
 $-7A + 18 = 21$, $-7A = 3$, $A = -3/7$
- 14) $\frac{5}{(15)} \frac{4}{8} + \frac{3}{(15)} \frac{4}{5} A = \frac{3}{(15)} \frac{11}{8}$
 $20 + 12A = 33$, $A = 1\frac{1}{12}$
- 15) $-6^2 - (-6)^2 = -36 - 36 = -72$
- 16) $5 + 5 - (-7) = 10 + 7 = 17$
- 17) $-[-(-7)] = -[7] = -7$
- 18) $(-8)^2 = 64$
- 19) $25\% = .25$, $.25 \times 76.98 = \$19.25$
- 20) $45\% = .45$, $.45 \times 600 = 270$ people

9D

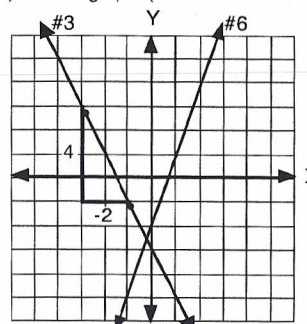
- 1) on the graph
- 2) slope = $\frac{6}{6} = 1$
- 3) y-intercept = -4
- 4) $Y = X - 4$, $X - Y = 4$
- 5) C ($Y = 1/4 X + 2$)
- 6) on the graph



- 7) $Y = 1/4 X - 1$
- 8) $Y = -2X + 3$, slope = -2
- 9) $2X - Y = -5$
- 10) $4Y = -2X + 8$, $Y = -1/2 X + 2$
- 11) $|-1 - 1 - 1 - 1|^2 = (-1)^2 + B(-1) \div 1$
 $16 = 1 - B \div 1$, $15 = -B$, $-15 = B$
- 12) $(3 + 5)^2 + |8 - 11| + Z = 4(Z - 2)$
 $8^2 + |-3| + Z = 4Z - 8$
 $64 + 3 + Z = 4Z - 8$, $75 = 3Z$, $25 = Z$
- 13) $5(B - 6) + 4(2B + 7) = 102$
 $5B - 30 + 8B + 28 = 102$
 $13B - 2 = 102$, $13B = 104$, $B = 8$
- 14) $55Q - 30Q = 125$
 $25Q = 125$, $Q = 5$
- 15) $-[-(-8)] = -[-8] = 8$
- 16) $-9^2 = -81$
- 17) $-(-4) = 4$
- 18) $3^2 + (-3)^2 = 9 + 9 = 18$
- 19) $76\% = .76$, $.76 \times 200 = \$152$
- 20) $\frac{WF}{8} \times 8 = \frac{2}{8}$ check
 $WF = \frac{2}{8} = \frac{1}{4}$ $\frac{1}{4} \times \frac{8}{1} = 2$

9E

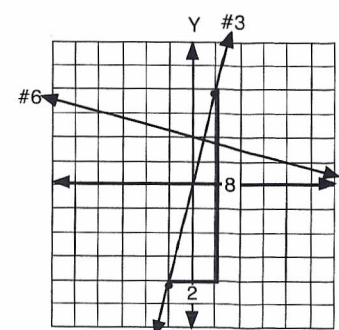
- 1) on the graph
- 2) slope = $\frac{4}{-2} = -2$
- 3) y-intercept = -3
- 4) $Y = -2X - 3$, $2X + Y = -3$
- 5) B ($Y = 3X$), C
- 6) on the graph (line will have a slope of 3)



- 7) $Y = 3X - 2$
- 8) $-1/5$
- 9) $3X + Y = -6$
- 10) $Y + 2X = -1$, $Y = -2X - 1$
- 11) $24Y - 108Y + 96 = 48 - 12Y$
 $-84Y + 96 - 48 = -12Y$
 $48 = 72Y$, $2/3 = Y$
- 12) $\{-[-(-9)] + 7^2\} \div 5 \div 2 = Q + 4$
 $\{-9 + 49\} \div 5 \div 2 = Q + 4$
 $40 \div 5 \div 2 = Q + 4$, $8 \div 2 - 4 = Q$, $0 = Q$
- 13) $8(A + 3 - 9) - 4(2A + 5) = 2A + 4$
 $8A + 24 - 72 - 8A - 20 = 2A + 4$
 $-68 - 4 = 2A$, $-72 = 2A$, $-36 = A$
- 14) $(6 + 6)^2 + |100 - 1| - 14^2 = 5 \times 9 + B$
 $12^2 + 99 - 196 = 45 + B$
 $243 - 196 - 45 = B$, $2 = B$
- 15) $-[-(6 - 9 + 3 - 5)] = -[-(-5)] = -5$
- 16) $-5^3 = -125$
- 17) $\frac{WF}{10} \times 10 = \frac{3}{10}$ check
 $WF = \frac{3}{10}$ $\frac{3}{10} \times \frac{10}{1} = 3$
- 18) $8.75 \div .25 = 35$ packs
- 19) $6\% = .06$, $.06 \times 115 = \$6.90$
- 20) $-N^2 - N^2$

10A

- 1) on the graph
- 2) slope = $\frac{8}{2} = 4$
- 3) y-intercept = 0
- 4) $Y = 4X$
- 5) B
- 6) on the graph
- 7) $Y = -1/4 X + 2$
- 8) $Y + 1/4 X = 2$, $X + 4Y = 8$



- 9) on the graph
- 10) slope = $-\frac{2}{2} = -1$
- 11) y-intercept = -2
- 12) $Y = -X - 2$
- 13) A ($Y = X - 2$)
- 14) on the graph
- 15) $Y = X + 2$
- 16) $X - Y = -2$

