

Math 990 Linear Equation Practice Problem Set

Name _____

SHORT ANSWER.

Solve the equation.

1) $4y - 5 = -6 + 2y$

2) $6(x + 5) = (6x + 30)$

3) $7r + 9 = 44$

4) $\frac{1}{9}(x + 27) + \frac{1}{8}(x + 8) = x - 7$

5) $0.055(800) + 0.08x = 0.06(800 + x)$

Solve the problem.

6) If 5 is added to a number and the sum is doubled, the result is 16 less than the number. Find the number.

7) A merchant has coffee worth \$30 a pound that she wishes to mix with 60 pounds of coffee worth \$60 a pound to get a mixture that can be sold for \$50 a pound. How many pounds of the \$30 coffee should be used?

8) A high school graduating class is made up of 444 students. There are 202 more girls than boys. How many boys are in the class?

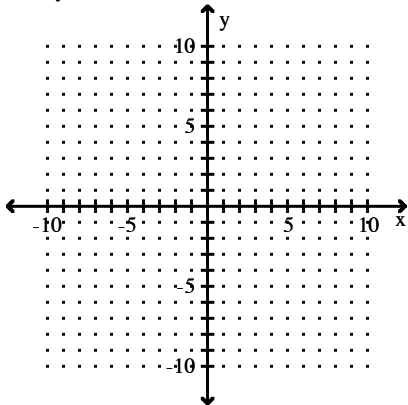
9) The sum of three consecutive even integers is 264. Find the integers.

Solve.

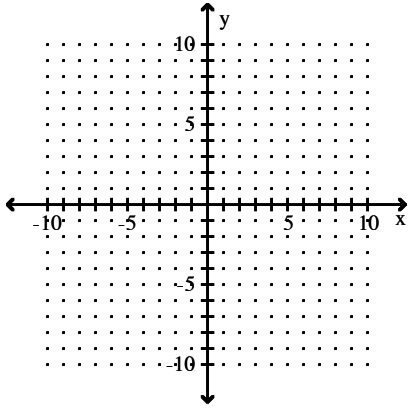
10) Is (2, 3) a solution of $4x - 4y = 20$?

Graph the linear equation. Give the x- and y-intercepts.

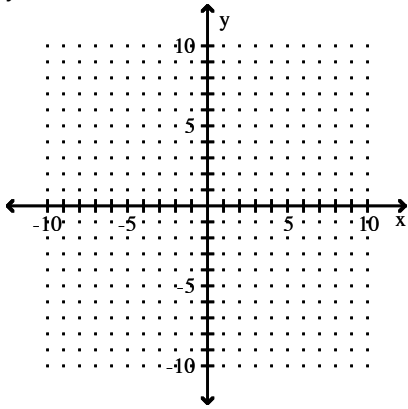
11) $2x + y = -6$



12) $x + 3 = 0$



13) $y = -3$

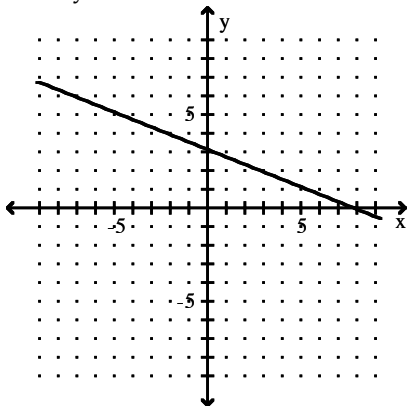


Find the slope of the line.

14) Through $(-3, 3)$ and $(-5, 8)$

Write an equation for the line. Give the final answer in slope-intercept form.

15) $2x + 5y = 16$



16) Through $(-6, 3)$ and $(6, -8)$

17) Through $(5, 4)$, $m = -2$

Answer Key

Testname: LINEAREQUATIONPRACTICE

1) $\left\{-\frac{1}{2}\right\}$

2) {all real numbers}

3) {5}

4) $\left\{\frac{72}{5}\right\}$

5) {200}

6) -26

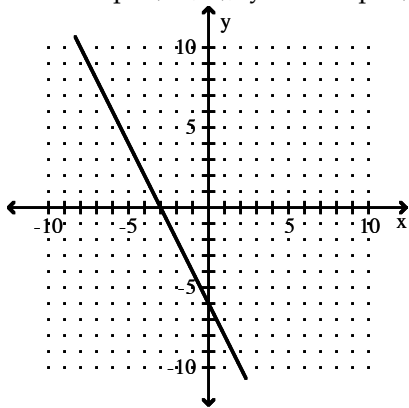
7) 30 pounds

8) 121 boys

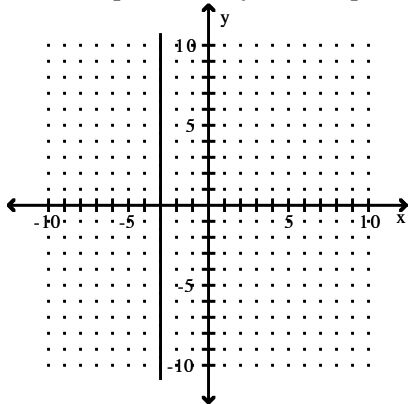
9) 86, 88, 90

10) No

11) x-intercept: (-3, 0); y-intercept: (0, -6)



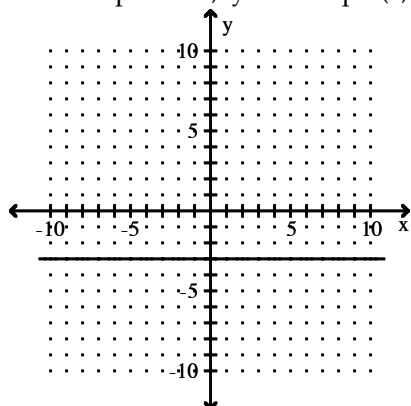
12) x-intercept: (-3, 0); y-intercept: none



Answer Key

Testname: LINEAREQUATIONPRACTICE

13) x-intercept: none; y-intercept: (0, -3)



14) $-\frac{5}{2}$

15) $y = -\frac{2}{5}x + \frac{16}{5}$

16) $y = -\frac{11}{12}x - \frac{5}{2}$

17) $y = -2x + 14$