Algebra II Homework #6

1) Solve:
$$\frac{7a}{12x} + \frac{5}{8y} = \frac{1}{6mx}$$
 for the letter x

2) Graph 3x - y = -3 and find the x and y intercepts.

3) Simplify:
$$\frac{-a - y^2}{-3x^0 - c^3}$$
 if $a = -6$, $c = -2$, $x = -4$, and $y = -3$

- 4) If nine more than the quotient of a number and six is five less than the product of the number and eight, find the number.
- 5) Find the distance between the points (-3, -6) and (1, -1).
- 6) Find the equation of the line having a slope of $\frac{-3}{8}$ and goes through the point (-2,6).
- 7) Find the equation of the line that goes through the points (-6,-4) and (-3, 2).
- 8) Find the equation of the line that is perpendicular to the line 4x 7y = 14 and goes through the point (5,-1).
- 9) Graph 2x 5y > 15
- 10) Find the equation of the line having a slope of $\frac{-5}{12}$ and goes through the point (-8,-1).
- 11) Find the equation of the line that goes through the points (-3,8) and (-3, -5).
- 12) Find the equation of the line that is parallel to the line 6x + 8y = -24 and goes through the point (-7,3).
- 13) Graph $4x + 3y \le 12$
- 14) Find the equation of the line that goes through the points (5,-6) and (-1,-9).
- 15) Find the equation of the line that is perpendicular to the line 8x + 12y = -3 and goes through the point (-6,-7).

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- 16) Graph -5x 10y < 20
- 17) Find the equation of the line that goes through the points (-2,-8) and (4, 8).
- 18) Find the equation of the line that is parallel to the line -5x+9y = -18 and goes through the point (-18,6).
- 19) Graph $\frac{2}{3}x \frac{1}{2}y \ge 2$
- 20) Find the equation of the line that is perpendicular to the line -5x-4=6 and goes through the point (-7,-2).

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