

Top 10<sup>+</sup>V9

Period:

Name:

1) Simplify  $3 - 4^2 + 5 \cdot 2 - (4 - 6 \cdot 5)$

2) Simplify  $4(5x - 2) - 6(3x - 4)$

3) Solve  $\frac{-2x-6}{3} = -4$

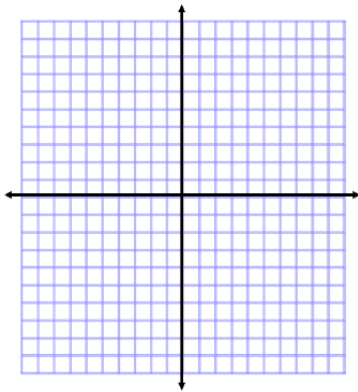
4) Solve and graph on a number line

$$3x - 5 > 7(x + 4) - 1$$



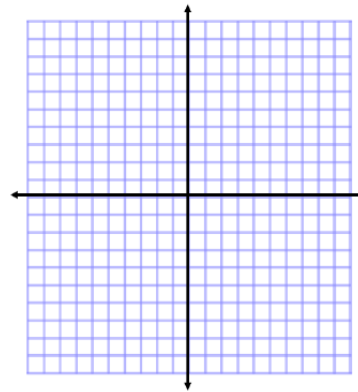
5) Graph the linear equation

$$y = 3x - 4$$



6) Graph the system of linear inequalities

$$y \geq -\frac{2}{5}x + 6$$
$$y > 3x$$



7) Solve the system of linear equations

$$y = 2x - 4$$
$$3x - y = 6$$

8) Multiply the polynomial

$$(2x - 3)(4x - 1)$$

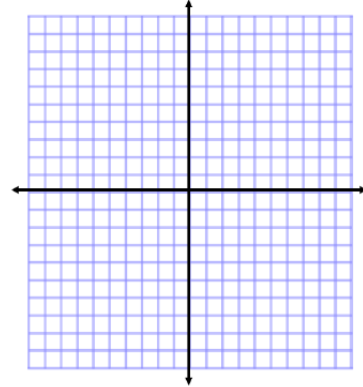
9) Identify the *slope* and *y-intercept*

$$5x - 2y = -18$$

10) Write the equation of the line in *slope-intercept* form that passes through the points  $(-4, -11)$  and  $(6, 4)$

11) Graph the quadratic function

$$y = -3x^2 + 6x + 8$$



12) Find the zeroes of the quadratic function

$$x^2 - 7x + 10$$

13) Simplify using only positive exponents

$$\left(\frac{-2x^3y^{-2}}{4x}\right)^2$$

14) In a standard deck of playing cards, what is the probability of pulling a card that is either a king or a diamond?

15) Simplify  
 $\sqrt{12} - 5\sqrt{3}$