

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Period: \_\_\_\_\_

## 5-1,2 HONORS Solving Systems of Equations PRACTICE QUIZ



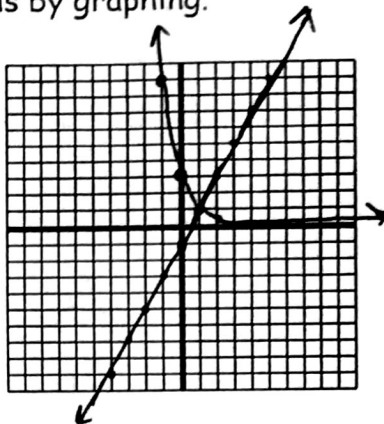
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1. Solve the following system of equations by graphing.

$$y = 2x - 1$$

$$y = 3\left(\frac{1}{3}\right)^x$$

x	y
-2	27
-1	9
0	3
1	1
2	1/3



Answers

1. (1, 1)

Solve.

2.

$$\textcircled{x} = -6y$$

$$4x + 9y = 5$$

$$4(-6y) + 9y = 5$$

$$-24y + 9y = 5$$

$$\frac{-15y}{-15} = \frac{5}{-15}$$

$$\boxed{y = -1/3}$$

$$x = -6(-1/3)$$

$$x = 2$$

2. (2, -1/3)

Solve.

3.

$$3x - 5y = -10$$

$$\textcircled{y} = \frac{3}{5}x + 2$$

$$3x - 5\left(\frac{3}{5}x + 2\right) = -10$$

$$3x - 3x - 10 = -10$$

$$-10 = -10$$

true

3. infinitely  
many  
solutions

4.

$$\begin{array}{r} 4x - 3y = -15 \\ 5x + 3y = -3 \\ \hline 9x = -18 \\ x = -2 \end{array}$$

$$\begin{array}{r} 4x - 3y = -15 \\ 4(-2) - 3y = -15 \\ -8 - 3y = -15 \\ +8 \quad +8 \\ \hline -3y = -7 \\ y = 7/3 \end{array}$$

4.  $\underline{(-2, 7/3)}$

5. \* Different ways to solve

$$\begin{array}{r} 4x - 3y = -3 \\ -4 \cdot (x - 2y = 8) \\ \hline -4x + 8y = -32 \\ 4x - 3y = -3 \\ \hline 5y = -35 \\ \boxed{y = -7} \end{array}$$

$$\begin{array}{r} 4x - 3y = -3 \\ 4x - 3(-7) = -3 \\ 4x + 21 = -3 \\ 4x = -24 \\ \boxed{x = -6} \end{array}$$

5.  $\underline{(-6, -7)}$