## TRS 92: Slope in Many Forms

1. On the grid below, place a point at $(0,3)$. Starting at that point, create a line with the slope of $\frac{1}{-4}$ using the concept of "rise over run". Draw the line with a colored pencil.

2. On the same grid and starting at the same point $(0,3)$, create a line with the slope of $\frac{-1}{4}$. Use a different color of pencil for this line.
3. What do you notice about the two lines? What does this tell you about the fractions $\frac{1}{-4}$ and $\frac{-1}{4}$ ?
4. What would a slope of $-\frac{1}{4}$ mean?
5. On the grid below, place a point at $(0,3)$. Starting at that point, create a line with the slope of $\frac{1}{4}$ using the concept of "rise over run". Draw the line with a colored pencil.

6. On the same grid and starting at the same point $(0,3)$, create a line with the slope of $\frac{-1}{-4}$. Use a different color of pencil for this line.
7. What do you notice about the two lines? What does this tell you about the fractions $\frac{1}{4}$ and $\frac{-1}{-4}$ ?
8. Convert each of the fractions to a decimal:
$\frac{-1}{4}=$ $\qquad$

$$
\frac{1}{-4}=
$$

$\qquad$

$$
\frac{-1}{-4}=\quad \frac{1}{4}=
$$

$\qquad$
9. Circle all the expressions that are equal to $-\frac{3}{10} x$ :

| $\frac{-3}{-10} x$ | $\frac{-3 x}{10}$ | $-0.3 x$ | $-\frac{3}{10 x}$ |
| :---: | :---: | :---: | :---: |
| $0.3 x$ | $\frac{-3}{10} x$ | $-\frac{1}{0.3} x$ | $\frac{3}{-10} x$ |

10. Graph the line between the two points $(-3,6)$ and $(-8,-2)$ on the grid below.

a. Is the slope of the line negative or positive?
b. Calculate the slope of the line. Show your work.
