Checking solutions to linear equations

1) Is the ordered pair ($\frac{1}{2}$, -3) a solution to: $8x + 3y = -5$ ?
2) Is the ordered pair (5, 3) a solution to: $3y - 6 = 3x$ ?

Finding solutions to linear equations

3) Find solutions to: $3x - 7y = 11$ using “x” values of -1, 6, and 8.

<table>
<thead>
<tr>
<th>use $x = -1$</th>
<th>use $x = 6$</th>
<th>use $x = 8$</th>
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4) Find solutions to: $5y - 2x = -3$ using “x” values of -6, 0, and 4.

<table>
<thead>
<tr>
<th>use $x = -6$</th>
<th>use $x = 0$</th>
<th>use $x = 4$</th>
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NOTE: You are allowed to simplify expressions that use a large division bar by dividing each term in the numerator by the term in the denominator.

If the expression is: \[ \frac{2x + 24}{6} \]

then make it: \[ \frac{2x + 24}{6} \cdot \frac{6}{6} \]

which simplifies to: \[ \frac{1}{3}x + 4 \]

Ex: Solve for y: \[ 5x + 3y = 12 \]

\[-5x \quad -5x \]

\[ 3y = 12 - 5x \]

\[ \frac{3y}{3} = \frac{12 - 5x}{3} \]

\[ y = 4 - \frac{5}{3}x \]

Now, solve the following equations for “y”!

5) \[-3x + 4y = 20\]

7) \[25 - 2x = 5y\]

6) \[18 - 3y = 1x\]

8) \[6y - 4x = 30\]