

Warm up:

Simplify.

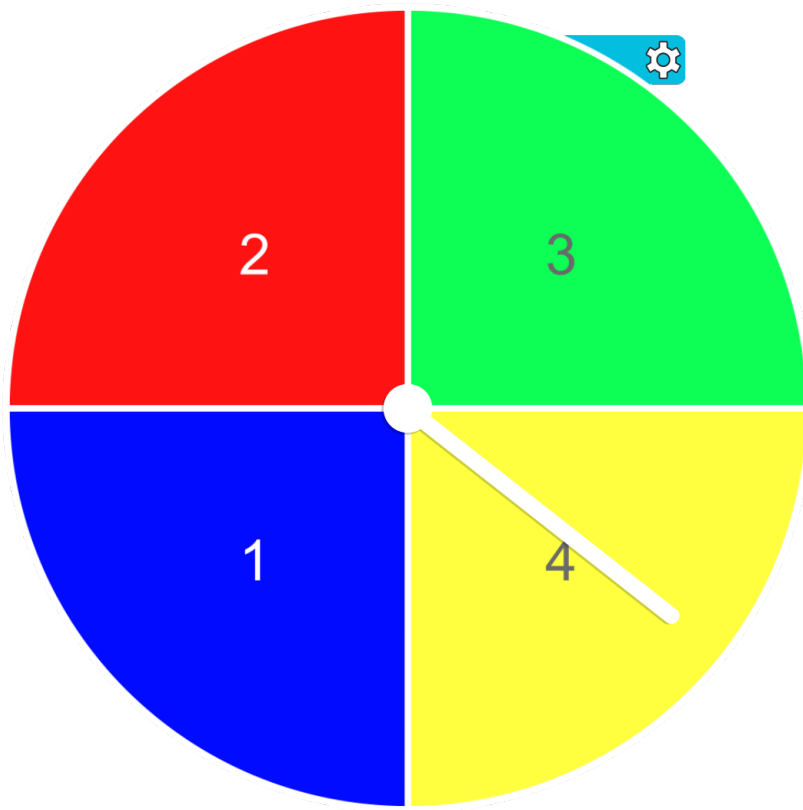
1) $-5x + 2(3x + 7)$

$$\underline{-5x} + \underline{6x} + 14 = \textcircled{x + 14}$$

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

$$\underline{6} - 12x + \underline{15}$$

$$\textcircled{21 - 12x}$$



Simplify.

$$\begin{array}{l} 6 - 63 \\ 6 + (-63) \end{array}$$

$$\begin{array}{r} 14 \overline{) 57} \\ \underline{-56} \\ 1 \end{array}$$

$$1\frac{2}{3}a + \frac{3}{7}b - 2 - 4\frac{1}{2}b$$

$$1\frac{2}{3}a - \frac{57}{14}b - 2$$

$$1\frac{2}{3}a - 4\frac{1}{14}b - 2$$

$$\frac{3}{7} - 4\frac{1}{2}$$

$$\frac{3}{7} - \frac{9}{2}$$

$$\frac{6}{14} - \frac{63}{14} = -\frac{57}{14}$$

Factor.

$$27x^2y - 36y$$

$$9y(3x^2 - 4)$$

Simplify.

$$\frac{5}{1} - \frac{21}{4}$$

$$\frac{20}{4} - \frac{21}{4} = -\frac{1}{4}$$

$$\begin{array}{r} 20 - 21 \\ 20 + (-21) \\ \hline -1 \end{array}$$

$$5 + \frac{3}{4}(2x - 7)$$

$$\underline{5} + \frac{6}{4}x - \underline{\frac{21}{4}}$$

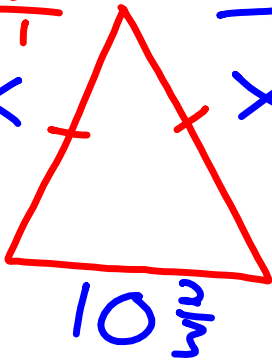
$$\frac{6}{4}x - \frac{1}{4}$$

$$1\frac{3}{4}x - \frac{1}{4}$$

$$\underline{1\frac{1}{2}x - \frac{1}{4}}$$

The perimeter of an isosceles triangle is $18\frac{1}{2}$ ft.
 Find length of each congruent side if the
 remaining side is $10\frac{2}{3}$ ft long.

$$\begin{array}{r} 2 \\ \times 37 \\ \hline 111 \\ 111 \\ \hline \end{array}$$



$$\begin{array}{r} 18\frac{1}{2} \\ - 10\frac{2}{3} \\ \hline 8\frac{1}{6} \end{array}$$

$$\begin{array}{r} x + x + 10\frac{2}{3} = 18\frac{1}{2} \\ 2x + 10\frac{2}{3} = 18\frac{1}{2} \\ -10\frac{2}{3} \quad -10\frac{2}{3} \\ \hline 2x = 8\frac{1}{6} \end{array}$$

$$\begin{array}{r} 6 \cancel{=} 47 \\ 6 \cancel{=} 6 \\ \hline 6 \cancel{=} 6 \\ 6 \cancel{=} 6 \\ \hline \end{array}$$

$$\begin{array}{r} 2x = 47 \\ \cancel{2} \\ x = 23\frac{4}{6} \end{array}$$

$$= 3\frac{1}{2} \text{ ft}$$

$$\begin{array}{r} 47 \\ 6 \cancel{=} 6 \\ \hline 6 \cancel{=} 6 \\ 6 \cancel{=} 6 \\ \hline \end{array} \quad \begin{array}{l} \therefore 2 \\ \cancel{2} \end{array}$$

Solve.

$$6 = 2 - x$$

Write and simplify an expression to represent the following.

The perimeter of a rectangle that is 3in longer than it is wide.

Solve.

$$-2.2a + 16.3 = -4.6$$

Solve.

$$-2x + 7 = -11$$

Solve.

$$\frac{2}{5}n + 3 = \frac{1}{3}$$

Write and simplify an expression to represent the following.

The total bill at the spirit store if you buy four t-shirts and two hats and your dad buys three t-shirts and three hats.

Factor.

$$42a^2 - 7a + 35$$

You went to the concession stand at a football game and bought a soda and some hot dogs. Sodas cost \$3.75 each and the hot dogs cost \$4.50 each. If your total bill was \$17.25, how many hot dogs did you buy?

