

## Writing Equations for word Problems

Ex 1: The U.S. DuPont Relay for Life team has raised \$1275. They start a new fund raiser asking families to contribute \$5 each. How many families need to participate for the team to reach its goal of \$2,000?

1.) Info.

\$1275 raised so far

\$5 each family needed

Goal \$2000.

f - # of families

$$\begin{array}{r} \times 100 \\ -1275 \\ \hline 725 \end{array} \quad \begin{array}{r} 15 \\ 5 \overline{) 725} \\ \underline{-50} \\ 22 \\ \underline{-20} \\ 25 \end{array}$$

Goal = raised + \$ per family  
so far

$$2,000 = 1275 + 5f$$
$$\begin{array}{r} -1275 \\ \hline 725 = 5f \end{array}$$

$$\frac{725}{5} = \frac{5f}{5}$$

$$145 = f$$

They will need 145 families to participate in the fundraiser.

Ex 2: Kara goes to a carnival and is charged \$5 to get in. She has \$50 to spend total for the night. Kara goes on 15 rides that night. How much does it cost per ride?

Info.

\$5 to get in

\$50 total

15 rides

C - \$ per ride

$$\text{Total} = \text{cost to get in} + \$(\text{Rides})$$

$$50 = 5 + 15C$$

$$\begin{array}{r} 50 \\ - 5 \\ \hline \end{array} = \begin{array}{r} 15C \\ - 5 \\ \hline \end{array}$$

$$\begin{array}{r} 45 \\ \hline 15 \end{array} = \begin{array}{r} 15C \\ \hline 15 \end{array}$$

$$3 = C$$

Each ride will cost \$3.