## Solving Rational Equations

## Solve for $x$ and check for extraneous solutions

$$
\frac{4}{x+1}=2
$$

## Solve for x and check for extraneous solutions

$$
\frac{3}{5 x}=\frac{2}{x-7}
$$

Solve for x and check for extraneous solutions

$$
\frac{1}{2 x+5}=\frac{x}{11 x+8}
$$

## Solve for x and check for extraneous solutions

$\frac{7}{2}+\frac{3}{x}=3$

## Solve for x and check for extraneous solutions

$$
\frac{5 x}{x-2}=7+\frac{10}{x-2}
$$

A company produces computer desks. The average cost to produce $x$ desks per month can be modeled by the function below. How many desks would the company need to produce each month in order for the average cost to be $\$ 85$ per desk?

$$
C(x)=\frac{4000+50 x}{x}
$$

