### 7.5 Solving Quadratic Equations by Factoring

Solving a quadratic, means to find the ZEROS or the $x$-intercepts of an quadratic function.

You can find the zeros algebraically using factoring.

Example: $x^{2}+8 x+15=0$

Example: $x^{2}-7 x-18=0$
Example: $x^{2}-9=0$

Example: $2 x^{2}-11 x=-5$

How do you know if your solution is correct?

Working in reverse. What quadratic equation could have the roots -6 and 8 ?

How about roots of $\frac{3}{5}$ and $\frac{1}{2}$ ?

