L15

Solving Quadratics by Factoring

Warm-up

Factor

Take a minute and discuss with your partner about :

What are factors used for?

Factors help give the **roots** of the polynomials.

**Roots** are the **x intercepts**.

https://www.desmos.com/calculator

I do:

Solve the quadratic equation:

|  |  |
| --- | --- |
| Write in Standard Form |  |
| Factor |  |
| Solve for each factor. |  |  |
|  |  |

We do:

|  |  |
| --- | --- |
| Write in Standard Form |  |
| Factor |  |
| Solve for each factor. |  |  |
|  |  |

We do:

|  |  |
| --- | --- |
| Write in Standard Form |  |
| Factor |  |
| Solve for each factor. |  |  |
|  |  |

You do:

I do:

Create the polynomial given the factors.

Given solutions **x=4 and x=-5,**

find the quadratic equation.

|  |  |  |
| --- | --- | --- |
| Create the factors |  |  |
| Foil |  |

I do:

Create the polynomial given the factors.

Given solutions **x= and x=,**

find the quadratic equation.

|  |  |  |
| --- | --- | --- |
| Create the factors |  |  |
| Foil |  |

We do:

Create the polynomial given the factors.

Given solutions **x= and x=,**

find the quadratic equation.

|  |  |  |
| --- | --- | --- |
| Create the factors |  |  |
| Foil |  |

You do:

Create the polynomial given the factors.

Given solutions **x= and x=,**

find the quadratic equation.

|  |  |  |
| --- | --- | --- |
| Create the factors |  |  |
| Foil |  |

Exit Ticket

1) Solve the quadratic equation:

2) Create the polynomial given the factors.

Given solutions **x= and x=,**

find the quadratic equation.