

W-AZ Algebra 2 Week 25

Factoring

o larger signs different

$$x^2 - \underline{6}x - \underline{27} = 0$$

$$\underline{-9} * \underline{3} = -27$$

$$\underline{-9} + \underline{3} = -6$$

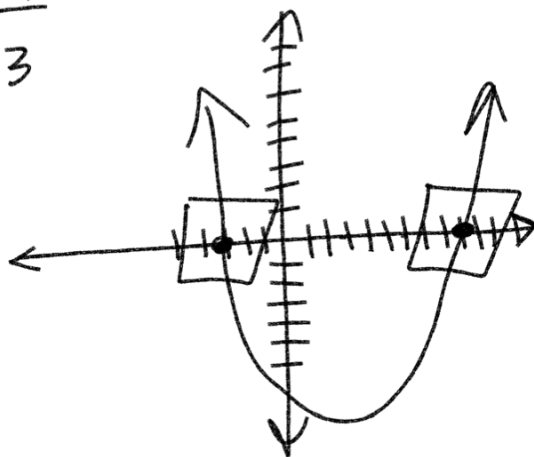
$$(x-9)(x+3) = 0$$

$$\frac{27}{9*3}$$

$$x-9=0$$
$$+9 \quad +9$$

$$x+3=0$$
$$-3 \quad -3$$

$x=9$	$x=-3$
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$$x^2 - 36 = 0$$

minus

Difference of Squares

$$\sqrt{x^2} \quad \sqrt{36}$$
$$(x+6)(x-6) = 0$$

$$x+6=0$$
$$-6 \quad -6$$
$$x-6=0$$
$$+6 \quad +6$$

$x=-6$	$x=6$
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Both perfect squares

$$x^2 + 15x + 36 = 0$$

both same sign

	36
3	12
6	6
9	4
2	18
1	36

$$\underline{3} * \underline{12} = 36$$

$$\underline{3} + \underline{12} = 15$$

$$(x + 3)(x + 12) = 0$$

$$x + 3 = 0$$

-3 -3

$$x + 12 = 0$$

-12 -12

$x = -3$	$x = -12$
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$$\frac{4}{4}x^2 + \frac{16x}{4} - \frac{84}{4} = 0$$

different signs

$$\underline{-3} * \underline{7} = -21$$

$$\underline{-3} + \underline{7} = 4$$

$$4(x^2 + 4x - 21) = 0$$

⊕ Biggs

$$(x - 3)(x + 7) = 0$$

$$x - 3 = 0$$

+3 +3

$x = 3$

$$x + 7 = 0$$

-7 -7

$x = -7$

$$2x^2 - 3x - 20 = 0$$

signs different

$$\frac{2}{2 \cdot 1}$$

$$\frac{-20}{1 \cdot 20}$$

$$2 - 10$$

$$4 - 5$$

	Red	Blue
Blue	purple	blue
Yellow	orange	Green

	2x	-2
x	2x²	-2x
+10	20x	-20

$20x + (-2x)$

18x

	2x	+2
x	2x ²	2x
-10	-20x	-20

$-20x + 2x$

-18x

	2x	+10
x	2x ²	-10x
2	4x	-20

$-10x + 4x = -6x$

	2x	-4
x	2x ²	-4x
+5	10x	-20

$10x - 4x = 6x$

	2x	-5
x	2x ²	-5x
+4	8x	-20

$8x - 5x = 3x$

	$2x$	$+5$
x	$2x^2$	$5x$
-4	$-8x$	-20

$-8x + 5x = -3x$

$$(2x+5)(x-4) = 0$$

$2x+5=0$
 $-5 \quad -5$
 $\frac{2x}{2} = \frac{-5}{2}$
 $x = -\frac{5}{2}$

$x-4=0$
 $+4 \quad +4$
 $x = 4$

different signs

$$3x^2 + 10x - 48 = 0$$

$$\frac{3}{3 \cdot 1}$$

$$\frac{48}{4 \ 12}$$

$$8 \ 6$$

$$2 \ 24$$

$$3 \ 16$$

$$1 \ 48$$

	$3x$	$+6$
x	$3x^2$	$6x$
-8	$-24x$	-48

$-24x + 6x = -18x$

$$+10x$$

	$3x$	-8
x	$3x^2$	$-8x$
6	$18x$	-48

$18x - 8x = 10x$

$$(3x-8)(x+6) = 0$$

$$3x-8=0$$

$$+8 \quad +8$$

$$x+6=0$$

$$-6 \quad -6$$

$$x = -6 \quad x = \frac{8}{3}$$

HW

Ch 5.5 events

Supplemental WS

Online HW 25

Quiz 25

} April 14th

HW/Q 23 due March 26th

HW/Q 24 due April 7th