

Solve Quadratic Equation by Factoring MAZE

(LEVEL 1)

Directions: Solve each equation by factoring. Use your answer to navigate through the maze. Show your work.

<p>START $(x + 5)(x + 1) = 0$</p> <p>A</p> <p>{5, 1}</p>	<p>$6(x + 8)(8x + 1) = 0$</p> <p>B</p> <p>$\{-8, -\frac{1}{8}\}$</p>	<p>$(x - 4)(x - 2) = 0$</p> <p>C</p> <p>{4, 2}</p>	<p>$(x + 7)(8x - 1) = 0$</p> <p>D</p> <p>$\{-7, \frac{1}{8}\}$</p>
<p>{-5, -1}</p>	<p>$\{-8, \frac{1}{8}\}$</p>	<p>{-4, -2}</p>	<p>$\{-7, \frac{1}{8}\}$</p>
<p>$(2x - 5)(x - 3) = 0$</p> <p>E</p> <p>$\{-\frac{5}{2}, 3\}$</p>	<p>$-4x(x - 6) = 0$</p> <p>F</p> <p>{-2}</p>	<p>$(x - 2)^2 = 0$</p> <p>G</p> <p>$\{-\frac{3}{4}, 0\}$</p>	<p>$x(4x - 3) = 0$</p> <p>H</p> <p>$\{\frac{3}{4}\}$</p>
<p>$\{\frac{5}{2}, -3\}$</p>	<p>{-4, 6}</p>	<p>{2}</p>	<p>$\{\frac{3}{4}\}$</p>
<p>$(x - 6)(3x - 1) = 0$</p> <p>I</p> <p>$\{-6, -\frac{1}{3}\}$</p>	<p>$-3x(x + 7) = 0$</p> <p>J</p> <p>{3, -7}</p>	<p>$-6(x + 3)(x + 2) = 0$</p> <p>K</p> <p>{-8, -6}</p>	<p>$(x - 8)(x - 6) = 0$</p> <p>L</p> <p>{8, 6}</p>
<p>$\{6, \frac{1}{3}\}$</p>	<p>$\{-\frac{7}{6}, \frac{4}{7}\}$</p>	<p>{3, 2}</p>	<p>{8, 6}</p>
<p>$2(x - 5)^2 = 0$</p> <p>M</p> <p>{5, 0}</p>	<p>$2(6x + 7)(7x - 4) = 0$</p> <p>N</p> <p>$\{\frac{7}{6}, -\frac{4}{7}\}$</p>	<p>$(x - 6)^2 = 0$</p> <p>O</p> <p>{6}</p>	<p>$3(2x - 5)(8x - 5) = 0$</p> <p>P</p> <p>$\{\frac{5}{2}, \frac{5}{8}\}$</p>
<p>{5}</p>	<p>{-5}</p>	<p>{-2, -7}</p>	<p>$\{\frac{5}{2}, \frac{5}{8}\}$</p>
<p>$(x + 6)(x + 8) = 0$</p> <p>Q</p> <p>{-6, -8}</p>	<p>$x(x + 5) = 0$</p> <p>R</p> <p>{-5, 0}</p>	<p>$-8(x - 2)(x - 7) = 0$</p> <p>S</p> <p>{-2, 7}</p>	<p>Good Job!  The End</p>

Solve Quadratic Equation by Factoring MAZE

(LEVEL 1)

Directions: Solve each equation by factoring. Use your answer to navigate through the maze. Show your work.

START
 $(x + 5)(x + 1) = 0$

A $\{5, 1\}$ **B** $\{-8, -\frac{1}{8}\}$ **C** $\{4, 2\}$ **D**

$\{-5, -1\}$ $\{5, \frac{3}{2}\}$ $\{-8, \frac{1}{8}\}$ $\{8, -\frac{1}{8}\}$ $\{-4, -2\}$ $\{7, \frac{1}{8}\}$ $\{-7, \frac{1}{8}\}$

$(2x - 5)(x - 3) = 0$ $-4x(x - 6) = 0$ $(x - 2)^2 = 0$ $x(4x - 3) = 0$

E $\{-\frac{5}{2}, 3\}$ **F** $\{-2\}$ **G** $\{-\frac{3}{4}, 0\}$ **H**

$\{\frac{5}{2}, -3\}$ $\{6, 0\}$ $\{-4, 6\}$ $\{-3, -2\}$ $\{2\}$ $\{3, 4\}$ $\{\frac{3}{4}\}$

$(x - 6)(3x - 1) = 0$ $-3x(x + 7) = 0$ $-6(x + 3)(x + 2) = 0$ $(x - 8)(x - 6) = 0$

I $\{-6, -\frac{1}{3}\}$ **J** $\{3, -7\}$ **K** $\{-8, -6\}$ **L**

$\{6, \frac{1}{3}\}$ $\{5, -2\}$ $\{-\frac{7}{6}, \frac{4}{7}\}$ $\{0, -7\}$ $\{3, 2\}$ $\{8, -6\}$ $\{8, 6\}$

$2(x - 5)^2 = 0$ $2(6x + 7)(7x - 4) = 0$ $(x - 6)^2 = 0$ $3(2x - 5)(8x - 5) = 0$

M $\{5, 0\}$ **N** $\{\frac{7}{6}, -\frac{4}{7}\}$ **O** $\{6\}$ **P**

$\{5\}$ $\{6, 8\}$ $\{-5\}$ $\{2, 7\}$ $\{-2, -7\}$ $\{2, -7\}$ $\{\frac{5}{2}, \frac{5}{8}\}$

$(x + 6)(x + 8) = 0$ $x(x + 5) = 0$ $-8(x - 2)(x - 7) = 0$

Q $\{-6, -8\}$ **R** $\{-5, 0\}$ **S** $\{-2, 7\}$

Good Job!
The End

Names: _____

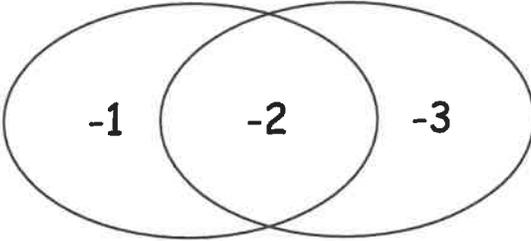
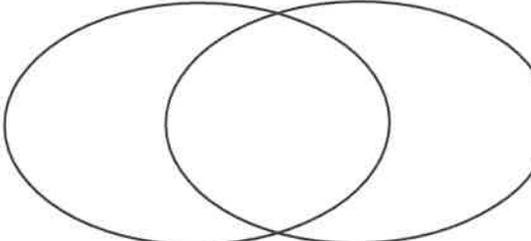
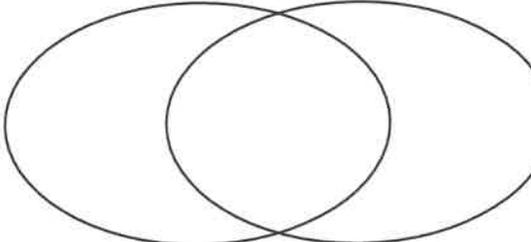
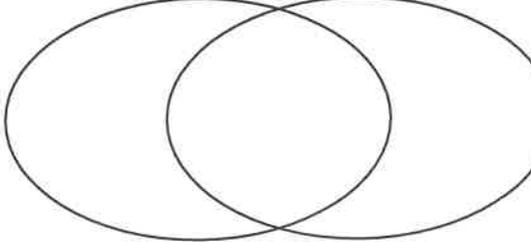
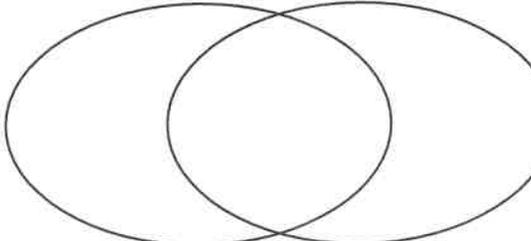
Date: _____

Period: _____

Venn Partner Activity - Quadratics - Factoring to Solve - Overlap

Each student must solve their problem and write the roots in their circle. One root should overlap with their partners, one should be unique to their problem. The overlapping root should go in the overlap of the two circles. If there is no overlap, check your work!

Partner A**Partner B**

<p>Ex)</p> $x^2 + 3x + 2 = 0$ $(x+2)(x+1)=0$ $x+2=0 \quad x+1=0$ $x=-2 \quad x=-1$		<p>Ex)</p> $x^2 + 5x + 6 = 0$ $(x+2)(x+3)=0$ $x+2=0 \quad x+3=0$ $x=-2 \quad x=-3$
<p>1)</p> $x^2 + 2x - 3 = 0$		<p>1)</p> $x^2 + 7x + 12 = 0$
<p>2)</p> $5x^2 = -15x$		<p>2)</p> $4x^2 = 20x$
<p>3)</p> $x^2 - 36 = 0$		<p>3)</p> $2x^2 - 11x - 6 = 0$
<p>4)</p> $2x^2 - 13x - 7 = 0$		<p>4)</p> $x^2 - 49 = 0$