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Before you begin, read the rubrics. If you have read the rubrics, please put a star in the box next to your name.

	Mastery (4)	Proficient (3)	Nearly Proficient (2)	Needs Improvement (1)
SSE.A.5 & SSEB.E.A Factoring Quadratic Expressions	Student can factor all 8 of the expressions correctly.	Student can factor 6 of the given expressions correctly and can make progress on the remaining two.	Student can factor 4 of the given expressions correctly and can make progress on two of the others.	Student can factor less than 4 of the given expressions.

Factor each expression completely.

1.  $x^2 + 11x + 28$

2.  $x^2 + 5x - 24$

3.  $2x^2 + 11x + 5$

4.  $12x^2 + 11x - 5$

5.  $x^2 - 25$

6.  $2x^2 + 10x$

7.  $6x - 24$

8.  $12x^2 + 14x - 6$



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Factor each expression completely.

1.  $x^2 + 11x + 28$

$$\begin{array}{|c|c|} \hline 4x & 28 \\ \hline x^2 & 7x \\ \hline \end{array}$$

$$\begin{array}{|c|c|} \hline 28x^2 & 7x \\ \hline 4x & 11x \\ \hline \end{array}$$

$$(x+4)(x+7)$$

2.  $x^2 + 5x - 24$

$$\begin{array}{|c|c|} \hline 8x & -24 \\ \hline x^2 & -3x \\ \hline \end{array}$$

$$\begin{array}{|c|c|} \hline -24x^2 & -3x \\ \hline 8x & 5x \\ \hline \end{array}$$

$$(x+8)(x-3)$$

3.  $2x^2 + 11x + 5$

$$\begin{array}{|c|c|} \hline 10x & 5 \\ \hline 2x^2 & 1 \\ \hline \end{array}$$

$$\begin{array}{|c|c|} \hline 10x^2 & x \\ \hline 10x & 11x \\ \hline \end{array}$$

$$(x+5)(2x+1)$$

4.  $12x^2 + 11x - 5$

$$\begin{array}{|c|c|} \hline 15x & -5 \\ \hline 12x^2 & -4x \\ \hline \end{array}$$

$$\begin{array}{|c|c|} \hline -60x^2 & -4x \\ \hline 15x & 11x \\ \hline \end{array}$$

$$(3x-1)(4x+5)$$

5.  $x^2 - 25 + 0x$

$$\begin{array}{|c|c|} \hline -5x & -25 \\ \hline x^2 & 5x \\ \hline \end{array}$$

$$\begin{array}{|c|c|} \hline -25x^2 & 5x \\ \hline -5x & 0x \\ \hline \end{array}$$

$$(x-5)(x+5)$$

6.  $2x^2 + 10x + 0$

$$\begin{array}{|c|c|} \hline 10x & 0 \\ \hline 2x^2 & 0 \\ \hline \end{array}$$

$$\begin{array}{|c|c|} \hline 0 & 0 \\ \hline 10x & 10x \\ \hline \end{array}$$

$$2x(x+5)$$

7.  $6x - 24 + 0x^2$

$$\begin{array}{|c|c|} \hline -24 & 0x \\ \hline 6x & 0x^2 \\ \hline \end{array}$$

$$\begin{array}{|c|c|} \hline 0x^2 & 6x \\ \hline 0x & 6x \\ \hline \end{array}$$

$$6(x-4)$$

8.  $12x^2 + 14x - 6$

$$\begin{array}{|c|c|} \hline 9x & -3 \\ \hline 6x^2 & -2x \\ \hline \end{array}$$

$$\begin{array}{|c|c|} \hline -18x^2 & -2x \\ \hline 9x & 7x \\ \hline \end{array}$$

$$(2)(2x+3)(3x-1)$$