

# M10-C Polynomials

Name: KEY

## Rectangles and Algebra Tiles Chart #3

Polynomial	Sketch of Rectangle	Grid	Factors
$x^2 + 4x - 5$		$\begin{array}{r rr} & x & +5 \\ x & x^2 & 5x \\ -1 & -x & -5 \end{array}$	$(x-1)(x+5)$
$x^2 - 8x + 7$		$\begin{array}{r rr} & x & -7 \\ x & x^2 & -7x \\ -1 & -x & +7 \end{array}$	$(x-1)(x-7)$
$2x^2 + x - 3$		$\begin{array}{r rr} & x & -1 \\ 2x & 2x^2 & -2x \\ +3 & 3x & -3 \end{array}$	$(x-1)(2x+3)$
$x^2 - 7x + 10$		$\begin{array}{r rr} & x & -2 \\ x & x^2 & -2x \\ -5 & -5x & +10 \end{array}$	$(x-5)(x-2)$
$2x^2 - 9x + 9$		$\begin{array}{r rr} & 2x & -3 \\ x & 2x^2 & -3x \\ -3 & -6x & +9 \end{array}$	$(x-3)(2x-3)$

$3x^2 - x - 4$		$\begin{array}{r l} & 3x - 4 \\ x & 3x^2 - 4x \\ +1 & +3x - 4 \end{array}$	$(x+1)(3x-4)$
$2x^2 + x - 10$		$\begin{array}{r l} & 2x + 5 \\ x & 2x^2 + 5x \\ -2 & -4x - 10 \end{array}$	$(x-2)(2x+5)$
$5x^2 + 7x - 6$		$\begin{array}{r l} & x + 2 \\ 5x & 5x^2 + 10x \\ -3 & -3x - 6 \end{array}$	$(5x-3)(x+2)$
$2x^2 - 5x - 12$		$\begin{array}{r l} & 2x + 3 \\ x & 2x^2 + 3x \\ -4 & -8x - 12 \end{array}$	$(x-4)(2x+3)$
$3x^2 - 14x + 8$		$\begin{array}{r l} & 3x - 2 \\ x & 3x^2 - 2x \\ -4 & -12x + 8 \end{array}$	$(x-4)(3x-2)$