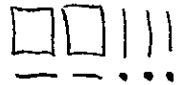

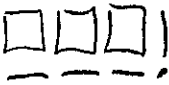
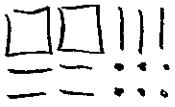



M10-C Polynomials

Name: KEY

Rectangles and Algebra Tiles #1



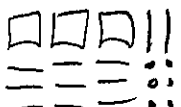
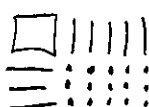
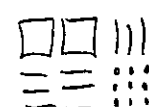
Polynomial	Sketch of Rectangle	Grid	Dimensions (factors)
$2x^2 + 5x + 3$		$\begin{array}{r l} & 2x + 3 \\ \hline x & 2x^2 \quad 3x \\ +1 & 2x \quad 3 \end{array}$	$(x+1)(2x+3)$
$x^2 + 5x + 6$		$\begin{array}{r l} & x + 3 \\ \hline x & x^2 \quad 3x \\ +2 & 2x \quad 6 \end{array}$	$(x+2)(x+3)$
$3x^2 + 4x + 1$		$\begin{array}{r l} & 3x + 1 \\ \hline x & 3x^2 \quad x \\ +1 & 3x \quad 1 \end{array}$	$(x+1)(3x+1)$
$2x^2 + 7x + 6$		$\begin{array}{r l} & 2x + 3 \\ \hline x & 2x^2 \quad 3x \\ +2 & 4x \quad 6 \end{array}$	$(x+2)(2x+3)$
$x^2 + 7x + 12$		$\begin{array}{r l} & x + 3 \\ \hline x & x^2 \quad 3x \\ +4 & 4x \quad 12 \end{array}$	$(x+4)(x+3)$

$3x^2 + 8x + 4$		$\begin{array}{r l} & 3x + 2 \\ x & 3x^2 + 2x \\ +2 & 6x + 4 \end{array}$	$(x+2)(3x+2)$
$2x^2 + 7x + 5$		$\begin{array}{r l} & 2x + 5 \\ x & 2x^2 + 5x \\ +1 & 2x + 5 \end{array}$	$(x+1)(2x+5)$
$2x^2 + 25x + 12$		$\begin{array}{r l} & 2x + 1 \\ x & 2x^2 + x \\ +12 & 24x + 12 \end{array}$	$(x+12)(2x+1)$
$2x^2 + 7x + 3$		$\begin{array}{r l} & 2x + 1 \\ x & 2x^2 + x \\ +3 & 6x + 3 \end{array}$	$(x+3)(2x+1)$
$2x^2 + 11x + 12$		$\begin{array}{r l} & 2x + 3 \\ x & 2x^2 + 3x \\ +4 & 8x + 12 \end{array}$	$(x+4)(2x+3)$

M10-C Polynomials

Name: KEY

Rectangles and Algebra Tiles Chart #2

Polynomial	Sketch of Rectangle	Grid	Factors
$x^2 + 3x + 2$		$\begin{array}{r l} & x \quad +2 \\ \hline x & x^2 \quad 2x \\ +1 & x \quad 2 \end{array}$	$(x+1)(x+2)$
$2x^2 + 3x + 1$		$\begin{array}{r l} & 2x \quad +1 \\ \hline x & 2x^2 \quad x \\ +1 & 2x \quad 1 \end{array}$	$(x+1)(2x+1)$
$3x^2 + 11x + 6$		$\begin{array}{r l} & 3x \quad +2 \\ \hline x & 3x^2 \quad 2x \\ +3 & 9x \quad 6 \end{array}$	$(x+3)(3x+2)$
$x^2 + 8x + 15$		$\begin{array}{r l} & x \quad +5 \\ \hline x & x^2 \quad 5x \\ +3 & 3x \quad 15 \end{array}$	$(x+3)(x+5)$
$2x^2 + 9x + 9$		$\begin{array}{r l} & 2x \quad +3 \\ \hline x & 2x^2 \quad 3x \\ +3 & 6x \quad 9 \end{array}$	$(x+3)(2x+3)$

$3x^2+13x+4$		$\begin{array}{r l} & 3x+1 \\ \times & 3x^2 \quad \times \\ +4 & 12x \quad 4 \end{array}$	$(x+4)(3x+1)$
$6x^2+5x+1$		$\begin{array}{r l} & 3x+1 \\ 2x & 6x^2 \quad 2x \\ +1 & 3x \quad 1 \end{array}$	$(2x+1)(3x+1)$
$5x^2+13x+6$		$\begin{array}{r l} & 5x+3 \\ \times & 5x^2 \quad 3x \\ +2 & 10x \quad 6 \end{array}$	$(5x+3)(x+2)$
$5x^2+8x+3$		$\begin{array}{r l} & 5x+3 \\ \times & 5x^2 \quad 3x \\ +1 & 5x \quad 3 \end{array}$	$(x+1)(5x+3)$
$8x^2+18x+9$		$\begin{array}{r l} & 4x+3 \\ 2x & 8x^2 \quad 6x \\ +3 & 12x \quad 9 \end{array}$	$(2x+3)(4x+3)$

M10-C Polynomials

Name: KEY

Rectangles and Algebra Tiles Chart #3

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

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