

Algebra Tile Polynomials

Sketch each of the following expressions with algebra tiles and then write the simplified expression. Do not forget to make zero pairs to get rid of some variables and numbers.

Expression	Sketch	Simplified Expression
$3x - 1 - 5x - 4$		$-2x - 5$
$2x - (-x + 5)$	<p style="text-align: center;">(Flip over because of -.)</p>	$3x - 5$
$-2(3x - 2)$	<p style="text-align: center;">(Flip all these over because of - 2.)</p>	$-6x + 4$
$2(2x - 6) + x + 5 - 3x$		$2x - 7$
$3(2x - 1) + \frac{1}{2}(2x + 4)$	<p style="text-align: center;">Take only $\frac{1}{2}$ of $2x + 4$.</p>	$7x - 1$
$\frac{1}{4}(8x + 4) + \frac{1}{2}(4x - 6)$	<p style="text-align: center;">Take only $\frac{1}{4}$ of $8x + 4$.</p> <p style="text-align: center;">Take only $\frac{1}{2}$ of $4x - 6$.</p>	$4x - 2$