

**MPM 2D****EXPANDING QUADRATIC EXPRESSIONS**

Quadratic expressions can be expanded into **standard form** using the **distributive property**, then simplified by collecting like terms.

Expand and simplify each expression.

① 
$$(2x + 3)(x - 2)$$
  
  
$$= 2x^2 - 2x + 3x - 6$$

=

③ 
$$(2n + 7)(2n - 7)$$
      ④ 
$$-2(d - 4)(5d + 2)$$

⑤ 
$$3(3x - 4y)(2x - y)$$

⑥ 
$$(2w + 3k)(w - k) - (w + 2k)^2$$

⑦ Write a simplified expression for the area of the rectangle.

$$3m + 2$$

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$$2m - 1$$

⑧ Determine the equation of the parabola with zeros -2 and 8 and passes through the point (3, 7). Write the equation in standard form.

⑨ Determine the equation of the parabola in standard form.

