

Algebra 1 8.4

Find squares of sums and differences

Find the product of a sum and a difference

sum $+$

difference $-$

product $\times$

EWE

difference of squares

X-factor

Scavenger hunt

Guided Practice

Find each product.

2A. $(6p - 1)^2 = (6p - 1)(6p - 1)$

$$\begin{array}{r} 6p - 1 \\ 6p - 1 \\ \hline -6p + 1 \\ 36p^2 - 6p \\ \hline 36p^2 - 12p + 1 \end{array}$$

2B. $(a - 2b)^2$

$$\begin{array}{l} -2ab \cdot 2 \\ -4ab \end{array}$$

$$\begin{array}{r} a - 2b \\ a - 2b \\ \hline a^2 - 2ab + 4b^2 \\ -2ab + 4b^2 \\ \hline a^2 - 4ab + 4b^2 \end{array}$$

Example 4 Product of a Sum and a Difference

Find $(2x^2 + 3)(2x^2 - 3)$.

$$\begin{array}{r} 2x^2 + 3 \\ 2x^2 - 3 \\ \hline 4x^4 - 6x^2 - 6x^2 - 9 \\ \hline 4x^4 - 9 \end{array}$$

Guided Practice

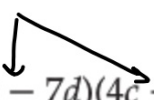
Find each product.

4A. $(3n + 2)(3n - 2)$

$$\begin{array}{r} 3n + 2 \\ 3n - 2 \\ \hline 9n^2 + 6n - 6n - 4 \\ \hline 9n^2 - 4 \end{array}$$

$$25x^2 - 16$$

4B. $(4c - 7d)(4c + 7d)$



$$16c^2 - 49d^2$$

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