

Algebra 1      8.4

Find squares of sums and differences

Find the product of a sum and a difference

Find GCF\*

\* 6th grade standard

sum      +

difference      —

product      ·

EWE

difference of squares

$$x^2 - 25$$

matching activity

triangle puzzle

X-factor

$2 \cdot 6p \cdot -1$   
**Guided Practice**

$2 \cdot a \cdot -2b$

Whiteboards

Find each product.

2A.  $(6p - 1)^2 = 36p^2 - 12p + 1$

2B.  $(a - 2b)^2 = a^2 - 4ab + 4b^2$

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

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

Matching activity (partners)  
Shotgun start  
Check with me when finished

What is GCF?

The biggest term that is a factor of both

25            45

58            24

$30xy^2$          $20x^2y$

$$(x + 3n)(x - 3n)$$

$$x + 3n$$

$$x - 3n$$

$$\begin{array}{r} x^2 \quad \begin{array}{c} -3nx \\ +3nx \end{array} \quad -9n^2 \\ \hline x^2 - 9n^2 \end{array}$$

$$(2x + 5)(2x - 5)$$

$$4x^2 - 25$$