

Multiplying Binomials

Binomials - A polynomial with only two terms.

$$x + 4$$

$$3x^2 - 10$$

$$\frac{1}{2}x^2 - 1$$

To multiply binomials, use the FOIL method.

First

Outer

Innner

Last

$$(x + 4)(x + 2)$$

1. Find each product.

a) $(x - 4)(x - 10)$

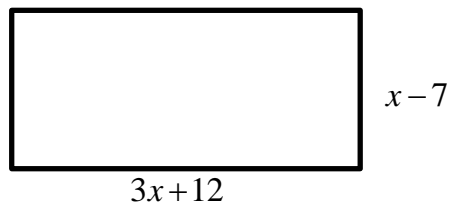
b) $(x^2 - 8)(2x^2 + 7)$

c) $(x - 8)(x + 8)$

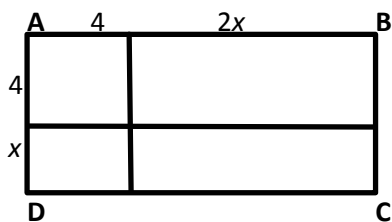
d) $(4x^2 - 1)(-x - 12)$

e) $\left(x - \frac{1}{2}\right)\left(x + \frac{1}{4}\right)$

2. Write an expression for the area of the rectangle.



3. Find the area of Rectangle ABCD.



4. Find the area of a square if each side is $x + 2$.