## Multiplying Monomials

1. $-\frac{3}{5}xy^{3}\left(5xy^{2}\right)$

## Multiplying Monomials and Binomials

1. $-2xy^{3}\left(x-10y\right)$

## Multiplying any Two Polynomials

Show with Box and with FOIL

Multiply.

1. $\left(6x+7\right)\left(3x+2\right)$
2. $\left(-3r-2s^{2}\right)\left(5r-6s^{2}\right)$
3. $\left(2a-7b\right)\left(2a+7b\right)$
4. $\left(1-2x\right)\left(1+2x\right)$
5. $\left(5r+3\right)^{2}$
6. $\left(5r-3\right)^{2}$
7. $\frac{3}{5}xy\left(x-10y+4\right)$
8. $\left(5x^{2}+3xy-7y^{2}\right)\left(3x-2y\right)$
9. $\left(6-5a\right)\left(a+1\right)\left(2-3a\right)$

## Function Notation

Recall Function notation.

Consider the following polynomial function which is expressed in function notation:

$$f\left(x\right)=x^{2}-2x+1$$

Ex: Evaluate the function for:

1. $f\left(1\right)$
2. $f\left(-1\right)$
3. $f\left(0\right)$
4. $f\left(a\right)$
5. $f\left(a-3\right)$
6. $f\left(a+h\right)-f(a)$