M8 - 6.1 - Simplifying Expanding Fractions Notes

Simplification

$$\frac{2}{4} =$$

$$\frac{2 \div 2}{4 \div 2} = \left(\frac{1}{2}\right)$$
    Divide the top and bottom by the GCF

$$\frac{6}{9} =$$

$$\frac{6 \div 3}{9 \div 3} = \left(\frac{2}{3}\right)$$
    Divide the top and bottom by the GCF

Rule: Do to the top as you did to the bottom.

Expansion

$$\frac{1}{2} =$$

$$\frac{1 \times 2}{2 \times 2} = \left(\frac{2}{4}\right)$$
    Multiply the top and bottom by an integer.

$$\frac{1}{2} =$$

$$\frac{1 \times 3}{2 \times 3} = \left(\frac{3}{6}\right)$$
    Multiply the top and bottom by an integer.