

## 2.5N – Simplifying Rational Expressions

Warm-up: Problems 16-19 on homework

Factoring Review:

1.  $35r^2 - 40r$

2.  $m^2 + 4m - 45$

3.  $2v^2 + 7v + 6$

4.  $3a^3 + 20a^2 - 100a$

5.  $9n^2 - 1$

6.  $27m^3 + 1$

What can you simplify?

1.  $\frac{6+8}{6} =$

2.  $\frac{x+8}{x} =$

3.  $\frac{6(8)}{6} =$

4.  $\frac{x(8)}{x} =$

5.  $\frac{x^2+8x+7}{x+7} =$

6.  $\frac{x^2+8x+7}{8x+7} =$

Examples:

1.  $\frac{5x^2 - 5x}{1 - x}$

2.  $\frac{r - 3}{r^2 - 6r + 9}$

3.  $\frac{v^2 + 11v + 28}{v^2 + 15v + 56}$

4.  $\frac{3b^2 - 20b - 32}{7b - 56}$

5.  $\frac{4x^2 + 25x - 21}{16x^2 - 9}$

6.  $\frac{n^3 - 64}{3n^2 + 12n + 48}$