

## 7.1 Simplify Rationals Practice

**Directions:** Simplify the expressions below. Be sure to list the excluded values

1.  $\frac{16m^2}{24m^7}$

$\frac{2}{3m^5} \quad m \neq 0$

2.  $\frac{n^2+7n}{4n^2+28n}$

$\frac{1}{4} \quad n \neq 0, -7$

3.  $\frac{x^2-10x-24}{x+2}$

$x-12 \quad x \neq -2$

4.  $\frac{1-9w^2}{12w-4}$

$-\frac{3w+1}{4} \quad w \neq \frac{1}{3}$

5.  $\frac{4a^2-36a}{2a^4-24a^3+54a^2}$

$\frac{2}{a(a-3)} \quad a \neq 0, 3, 9$

6.  $\frac{y^2-36}{5y^2-26y-24}$

$\frac{y+6}{5y+4} \quad y \neq 6, -\frac{4}{5}$