

**Rational Expression Worksheet:**

$$1) \frac{y^4 - 81}{xy + 4y + 3x + 12} \div \frac{1}{y^2 + 9}$$

$$2) \left( \frac{r+6}{r} - \frac{1}{r+2} \right) \div \left( \frac{r^2 + 4r + 3}{r^2 + r} \right)$$

$$3) \left( n + 5 - \frac{12}{n+1} \right) \div \left( \frac{n+9}{n+1} - \frac{5}{n} \right)$$

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

$$5) \left( x - \frac{5x}{x+2} \right) \div \frac{x-3}{x}$$

$$6) \frac{7}{x} + \frac{2x-3}{x}$$