

Name: \_\_\_\_\_

## Rational Expressions

1) Which of the following fractions are the same as each other (equivalent)?

1)  $\frac{ax}{bx}$ ,  $\frac{a}{b}$ ,  $\frac{a(c+d)}{b(c+d)}$ ,  $\frac{a^2x}{abx}$

2)  $\frac{x}{x+y}$ ,  $\frac{xz}{xz+yz}$ ,  $\frac{xp}{x+yp}$

3)  $\frac{ab+ac}{ad}$ ,  $\frac{ab+c}{ad}$ ,  $\frac{b+c}{d}$

2) Factorize and cancel down the following fractions if possible.

1)  $\frac{2x+6y}{6x-8y}$

2)  $\frac{6a-9b}{4a-6b}$

3)  $\frac{px-pq}{p^2-px}$

4)  $\frac{3x+2y}{6x}$

5)  $\frac{2xy+5xz}{6x}$

6)  $\frac{x^2-y^2}{(x+y)^2}$

7)  $\frac{x^2+5x+6}{x^2+x-2}$