

HW #2: Adding and Subtracting Rational Expressions

Simplify each expression.

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

2)
$$\frac{2}{2p} - \frac{2}{2p^2-4p}$$

3)
$$\frac{3x}{x-1} + \frac{3x}{x-2}$$

4)
$$\frac{2}{r+2} + \frac{r+1}{3}$$

5)
$$\frac{3n}{2n-6} + \frac{2}{2n}$$

6)
$$\frac{3r}{2r+2} + \frac{3r}{2}$$

7)
$$\frac{3}{2v-2} + \frac{3v}{2}$$

8)
$$\frac{3x}{2} + \frac{2}{x+3}$$

9)
$$\frac{2}{p+2} + \frac{2p}{3p}$$

10)
$$\frac{3}{n+3} + \frac{2n}{2n+2}$$

$$11) \frac{5}{2} - \frac{2m}{9m^2 - 12m}$$

$$12) \frac{5}{4n - 10} - \frac{2}{2n}$$

$$13) \frac{6}{4} - \frac{3x}{x + 1}$$

$$14) \frac{2}{p + 3} - \frac{4p}{3p + 6}$$

$$15) \frac{5}{3a} - \frac{6a}{4a + 10}$$

$$16) \frac{4p}{3p} - \frac{3}{2p + 12}$$

$$17) \frac{2a}{a + 2} - \frac{5a}{a - 3}$$

$$18) \frac{2p}{p - 5} - \frac{p - 5}{p + 4}$$

$$19) \frac{3}{3x + 18} - \frac{5}{2}$$

$$20) \frac{2}{3x + 12} - \frac{3x}{2}$$