

Chapter 11 Review #3

Simplify each.

1. $\frac{3}{x-2} \cdot \frac{x^2-4}{12}$

$$\frac{x+2}{4}$$

2. $\frac{5x}{x^2+2x} \div \frac{30x^2}{x+2}$

$$\frac{1}{6x^2}$$

3. $\frac{4w}{3w-5} \cdot \frac{7}{2w}$

$$\frac{14}{3w-5}$$

4. $\frac{6c-2}{c+5} \div \frac{3c-9}{c}$

$$\frac{2c(3c-1)}{3(c+5)(c-3)}$$

5. $\frac{5}{t} + \frac{t}{t+1}$

$$\frac{t^2+5t+5}{t(t+1)}$$

6. $\frac{9}{n} - \frac{8}{n+1}$

$$\frac{n+9}{n(n+1)}$$

$$\frac{9n+9-8n}{n(n+1)}$$

7. $\frac{2y}{y^2-9} - \frac{1}{y-3}$

$$\frac{1}{y+3}$$

$$\frac{2y-y-3}{(y+3)(y-3)}$$

8. $\frac{4b-2}{3b} + \frac{b}{b+2}$

$$\frac{7b^2+6b-4}{3b(b+2)}$$

9. $\frac{7m}{m^2-1} - \frac{10}{m+1}$

$$\frac{10-3m}{(m+1)(m-1)}$$

10. $\frac{9}{3x-1} + \frac{5x}{2x+3}$

$$\frac{15x^2+13x+27}{(3x-1)(2x+3)}$$