

### 3.1 Simplify Rational Expressions

### Corrective Assignment #2

The following rational expressions are in lowest terms. State the excluded value(s) for each.

1. $\frac{2x+1}{3x+5}$	2. $\frac{24n+1}{4n^2-16n}$	3. $\frac{y^2+5y}{y^2-7}$
4. $\frac{(p+3)(2p-1)}{4(p-2)(2p+5)}$	5. $\frac{4a(a-5)}{5a(a-4)(2a-3)}$	6. $\frac{c^2+2c-15}{c^2-12c+12}$

Reduce the rational expression to lowest terms. State the excluded value for each rational expression.

7. $\frac{3a(a+1)}{a^3+11a^2+10a}$	8. $\frac{2r^2+10r}{r^2-25}$	9. $\frac{x^2-16}{x^2-13x+36}$
10. $\frac{4x+12}{5(x+2)(x+3)}$	11. $\frac{p^2+2p-15}{2p^2-5p-3}$	12. $\frac{9n^2-25}{6n^2+7n-5}$

### ANSWERS TO CORRECTIVE ASSIGNMENT

1. $x \neq -\frac{5}{3}$	2. $n \neq 0, 4$	3. $y \neq \pm\sqrt{7}$	4. $p \neq 2, -\frac{5}{2}$
5. $a \neq 0, \frac{3}{2}, 4$	6. $c \neq 4, 8$	7. $a \neq -10, -1, 0, \frac{3}{a+10}$	8. $r \neq 5, \frac{2r}{r-5}$
9. $x \neq 4, 9, \frac{x+4}{x-9}$	10. $x \neq -2, -3, \frac{4}{5x+10}$	11. $p \neq -\frac{1}{2}, 3, \frac{p+5}{2p+1}$	12. $n \neq -\frac{5}{3}, \frac{1}{2}, \frac{3n-5}{2n-1}$