

3.1 Simplify Rational Expressions

Corrective Assignment #1

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

1. $\frac{2x+1}{3x-2}$	2. $\frac{24n+1}{3n^2-15n}$	3. $\frac{y^2+5y}{y^2-5}$
4. $\frac{(p+3)(2p-1)}{4(p+2)(2p+5)}$	5. $\frac{4a(a-5)}{5a(a-3)(2a+1)}$	6. $\frac{c^2-3c-10}{6c^2+13c-5}$

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

7. $\frac{3a(a-2)}{a^3+3a^2-10a}$	8. $\frac{2r^2+8r}{r^2-16}$	9. $\frac{x^2-9}{x^2-3x-18}$
10. $\frac{8x+16}{4(x+2)(x-3)}$	11. $\frac{p^2-p-20}{2p^2-7p-15}$	12. $\frac{9n^2-4}{3n^2+10n-8}$

ANSWERS TO CORRECTIVE ASSIGNMENT

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