3.2 Multiply and Divide Rational Expressions

Corrective Assignment

Perform the indicated operations and reduce to lowest terms.

1. $\frac{8m^2(m+3)}{4(m+3)} \cdot \frac{8m}{8m^2}$	2. $\frac{3k^2}{k+5} \div \frac{k^2-4k-60}{k^2+11k+30}$	3. $\frac{\frac{2}{3}}{\frac{x}{3}}$
4. $\frac{2x+5}{x^2+8x+16} \cdot 3x+12$	5. $\frac{\frac{x^2}{3}}{\frac{x^2}{x+4}}$	6. $\frac{5}{6x^3} \div \frac{10}{6x}$
7. $\frac{8(x+7)}{x+1} \div \frac{-8(x-3)}{(x+1)(x-3)}$	8. $\frac{n^2-17n+70}{n^2+2n-63} \div n^2-100$	9. $\frac{5}{7x-14} \cdot \frac{35x+42}{30x^2+36x}$
10. $\frac{k^2+7k+6}{4k+32} \cdot \frac{k^2+3k-40}{k^2+k-30}$	11. $\frac{\frac{25}{x+1}}{\frac{x+3}{x+1}}$	12. $\frac{2n^2-8}{n^2-8n-20} \cdot \frac{n^2-7n-30}{4n^2-8n}$

ANSWERS TO CORRECTIVE ASSIGMENT

1. $2m$	2. $\frac{3k^2}{k-10}$	3. $\frac{2}{x}$	4. $\frac{3(2x+5)}{x+4}$
5. $\frac{x+4}{3}$	6. $\frac{1}{2x^2}$	7. $-x-7$	8. $\frac{1}{(n+9)(n+10)}$
9. $\frac{5}{6x(x-2)}$	10. $\frac{k+1}{4}$	11. $\frac{25}{x+3}$	12. $\frac{n+3}{2n}$