Extra Review Practice

Factor:

(a) $2x^2 + 11x + 12$

(b) $3x^2 + 16x + 5$

(c) $6x^2 + 17x + 12$

(d) $2x^2 + 9x + 10$

(e) $12x^2 + 11x + 2$

(f) $2x^2 - 5x - 3$

(g) $3x^2 - 10x - 8$

(h) $3x^2 - 11x - 20$

(i) $5x^2 + 17x + 6$

(j) $10x^2 + 19x + 6$

Simplify:

(a) $\frac{3}{x+2} + \frac{5x}{x+3}$

(b) $\frac{4x}{x-5} - \frac{2}{x+2}$

(c) $\frac{x+1}{x+2} + \frac{x+3}{x+4}$

(d) $\frac{6}{x^2+5x+6} + \frac{2}{x^2+8x+15}$

(e) $\frac{4}{x^2-3x-10} - \frac{1}{x^2+5x+6}$

(f) $\frac{x+3}{x^2+6x+9} - \frac{2}{x+3}$

(g) $\frac{x^2+8x+15}{x^2+7x+10} - \frac{x+3}{x+2}$

(h) $\frac{x^2-9}{2x+6} - \frac{x^2}{x-3}$

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

(j) $\frac{3x}{x^2+6x} - \frac{2x+1}{x+6}$

Solve:

(a) $x^2 - 6x + 8 = 0$

(b) $x^2 + 8x + 15 = 0$

(c) $x^2 + 7x + 12 = 0$

(d) $x^2 + 9x - 22 = 0$

(e) $x^2 - 7x + 12 = 0$

(f) $2x^2 - x - 6 = 0$

(g) $2x^2 - 13x - 7 = 0$

(h) $3x^2 - 10x - 8 = 0$

(i) $7x^2 + 13x - 2 = 0$

(j) $x^2 - 18x + 77 = 0$