**Simplifying Algebraic Fractions**

Simplify

(a) $\frac{4x^{2}}{8x}$ (b) $\frac{4xy}{12y^{2}}$

(c) $\frac{10x^{2}y}{20xy}$ (d) $\frac{9x^{2}yz}{27y^{2}}$

(e) $\frac{15ab}{18a^{2}}$ (f) $\frac{36ab^{2}c}{6abd}$

Simplify

(a) $\frac{x(x+9)}{6x}$ (b) $\frac{2x(x-4)}{5(x-4)}$

(c) $\frac{x^{2}+6x}{5x}$ (d) $\frac{x^{2}-5x}{3x-15}$

(e) $\frac{3x-x^{2}}{6-2x}$ (f) $\frac{12x^{2}-6x}{14x-7}$

Simplify

(a) $\frac{x(x-5)}{(x+2)(x-5)}$ (b) $\frac{2x(x+1)}{4(x+2)(x+1)}$

(c) $\frac{x(x+5)}{x^{2}+7x+10}$ (d) $\frac{x^{2}+2x+1}{(x+1)(x-4)}$

Simplify

(a) $\frac{x^{2}+6x}{x^{2}+5x-6}$ (b) $\frac{x^{2}-x-6}{x^{2}+x-12}$

(c) $\frac{2x^{2}+14x}{x^{2}+10x+21}$ (d) $\frac{x^{2}-4}{x^{2}+2x-8}$

Simplify

(a) $\frac{x^{2}+7x+6}{2x^{2}+3x+1}$ (b) $\frac{3x^{2}+7x+2}{x^{2}+9x+14}$

(c) $\frac{5x^{2}+28x-12}{x^{2}+4x-12}$ (d) $\frac{2x^{2}+15x+25}{x^{2}-x-30}$

(e) $\frac{5x^{2}+7x-6}{x^{2}-5x-14}$ (f) $\frac{2x^{2}-32}{2x^{2}+9x+4}$

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