**Simplifying Using Power Laws**

Simplify

(a) $a×a×a×a$ (b) $2×b×b$

(c) $3c×4c$ (d) $5d×d$

(e) $x^{2}×x$ (f) $7y×2y^{2}$

(g) $9a×2a^{2}$

(h) $4b×5b×2b$

(i) $6c^{2}×c×3c$

Simplify

(a) $\frac{a^{2}}{a}$ (b) $\frac{b^{3}}{b}$

(c) $\frac{9c^{2}}{3c}$ (d) $\frac{15d}{3d}$

(e) $\frac{4a^{3}}{8a^{2}}$ (f) $\frac{10ab}{5b}$

(g) $\frac{60ab}{10bc}$ (h) $\frac{21x^{2}y}{3xy}$

Simplify

(a) $a^{5}×a^{3}$ (b) $b^{3}×b^{2}$

(c) $3d^{3}×4d^{4}$ (d) $6x×5x^{4}$

(e) $\frac{c^{7}}{c^{3}}$ (f) $\frac{y^{9}}{y^{2}}$

(g) $\frac{9a^{6}}{3a^{2}}$ (h) $\frac{27y^{12}}{9y^{7}}$

Simplify

(a) $(2a)^{2}$ (b) $(5b)^{2}$

(c) $(xy)^{2}$ (d) $(3y)^{3}$

(e) $(2d)^{3}$ (f) $(4ab)^{3}$

A rectangle has length $4ab$ and width $6a^{2}$. Write a simplified expression for the area of the rectangle.

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