

Perform the indicated operation and simplify. Assume all variables represent

a) $\sqrt{x} \cdot \sqrt[3]{x}$

b) $\frac{\sqrt{x}}{\sqrt[3]{x}}$

c) $\sqrt{x^3} \cdot \sqrt[5]{x^2}$

d) $\frac{\sqrt{x^3}}{\sqrt[5]{x^2}}$

e) $\sqrt[4]{a^3} \cdot \sqrt[3]{a^2}$

f) $\frac{\sqrt{ab^3}}{\sqrt[5]{a^2b^3}}$

g) $\sqrt{16x^3y^3} \cdot \sqrt[3]{8xy^2}$

h) $\frac{\sqrt[4]{x^2y^3}}{\sqrt{xy}}$

i) $\sqrt{(3-2x)^3} \cdot \sqrt[3]{(3-2x)^2}$

j) $\frac{\sqrt[3]{(1-x)^2}}{\sqrt[4]{1-x}}$