

Extra Practice: Solve for missing variables

①

$20 = 2x$
 $x = 10$

$J = 10$
 $K = 10\sqrt{3}$

②

$m = 6\sqrt{2}$

③

$8^2 = 4^2 + y^2$
 $48 = y^2$
 $y = \sqrt{48}$
 $y = 4\sqrt{3}$

④

$x = \frac{46}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}}$
 $= \frac{46\sqrt{2}}{2} = 23\sqrt{2}$

$\frac{46}{\sqrt{2}} = \frac{x\sqrt{2}}{\sqrt{2}}$

⑤

$W = 2x$

$W = 2 \left(\frac{16\sqrt{3}}{3} \right) = \frac{32\sqrt{3}}{3}$

$\frac{16}{\sqrt{3}} = \frac{x\sqrt{3}}{\sqrt{3}}$

$x = \frac{16}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{16\sqrt{3}}{3}$

$x = \frac{16\sqrt{3}}{3}$