Chapter 2 – Special Right Triangle Review

Find the value of x and y in each of the following triangles.

a)

30°

$3.2\sqrt{3} \frac{m}{=x}$

$y = 6.4m$

60°

3.2 m

$x = \underline{3.2\sqrt{3}\ m}$

$y = \underline{6.4\ m}$

b)

45°

$\frac{5\sqrt{2}cm}{2} = x$

$\frac{5\ cm}{\sqrt{2}} = \frac{x\sqrt{2}}{\sqrt{2}}$

45°

$y = \frac{5\sqrt{2}}{2}\ cm$

$x = \frac{5}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}}$

$= \frac{5\sqrt{2}}{2}$

$x = \underline{\dfrac{5\sqrt{2}}{2}\ cm}$

$y = \underline{\dfrac{5\sqrt{2}}{2}\ cm}$

c)

30°

$\frac{x\sqrt{3}}{\sqrt{3}} = \frac{4\ cm}{\sqrt{3}}$

$y = \frac{8\sqrt{3}}{3}\ cm$

60°

$x = \frac{4}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}}$

$x = \frac{4\sqrt{3}}{3}\ cm$

$x = \frac{4\sqrt{3}}{3}$

$x = \underline{\dfrac{4\sqrt{3}}{3}\ cm}$

$y = \underline{\dfrac{8\sqrt{3}}{3}\ cm}$