

**Chapter 15 Review B page 479-480 03/07/2019**

- 1) Make "your cheat sheet"**
- 2) E-mail your parents the due day of your Notebook**  
**(CC me on this e-mail)**

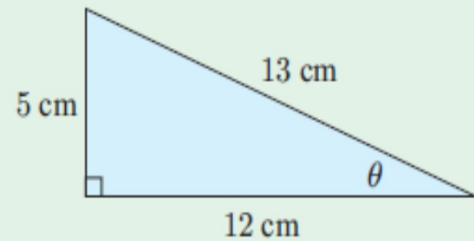
## REVIEW SET 15B

1 Find sin  $\theta$ , cos  $\theta$ , and tan  $\theta$  for the triangle:

$$1) \sin \theta = \frac{5}{13}$$

$$2) \cos \theta = \frac{12}{13}$$

$$3) \tan \theta = \frac{5}{12}$$



2 Find the lengths of the unknown sides:

$$c = ? \quad b = ?$$

$$1) \sin 23^\circ = \frac{47}{c} \quad \begin{matrix} (\text{opp}) \\ (\text{hyp}) \end{matrix}$$

$$c \cdot \sin 23^\circ = 47$$

$$c = \frac{47}{\sin 23^\circ}$$

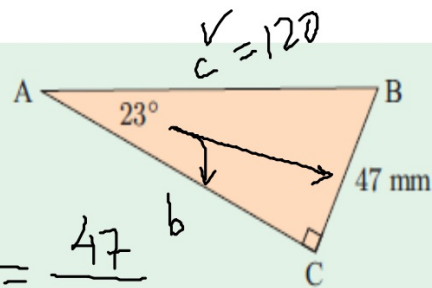
$$c \approx 120.2$$

$$2) \tan 23^\circ = \frac{47}{b}$$

$$b \tan 23^\circ = 47$$

$$b = \frac{47}{\tan 23^\circ}$$

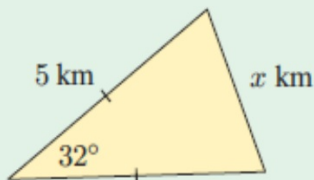
$$b = 110.72$$



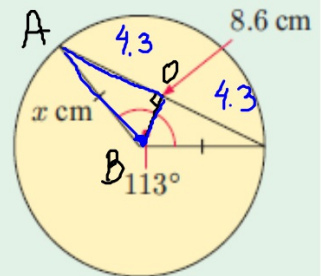
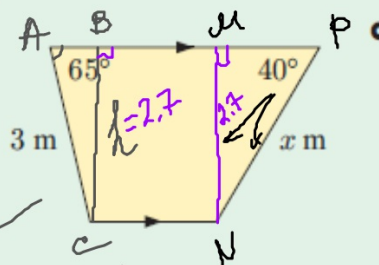
$$120^2 = 47^2 + b^2$$

3 Find, correct to two significant figures, the value of  $x$  in:

a



b



$\triangle ABC$

$$1) \sin 65^\circ = \frac{h}{3}$$

$$3 \sin 65^\circ = h$$

$$\boxed{2.7 = h}$$

2)  $\triangle MNP$

$$\sin 40^\circ = \frac{2.7}{x}$$

$$x \cdot \sin 40^\circ = 2.7$$

$$x = \frac{2.7}{\sin 40^\circ}$$

$$113^\circ \div 2 = \boxed{56.5^\circ}$$

$\triangle ABO$

$$\sin 56.5^\circ = \frac{4.3}{x}$$

$$x \cdot \sin 56.5^\circ = 4.3$$

$$x = \frac{4.3}{\sin 56.5^\circ} = 5.1$$

- 4 From a point 120 m horizontally from the base of a building, the angle of elevation to the top of the building is  $34^\circ$ . Find the height of the building.

