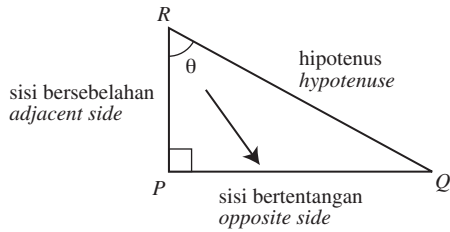


# Penyelesaian Lengkap

## PRAKTIS 5

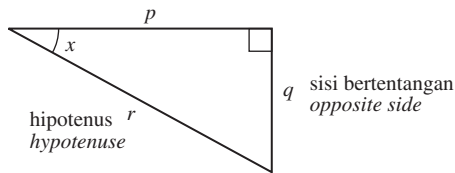
### Bahagian A

1



Jawapan/Answer: B

2

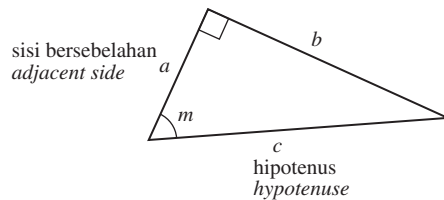


$$\sin x = \frac{\text{sisi bertentangan}}{\text{hipotenus}} \quad \sin x = \frac{\text{opposite side}}{\text{hypotenuse}}$$

$$\sin x = \frac{q}{r}$$

Jawapan/Answer: C

3



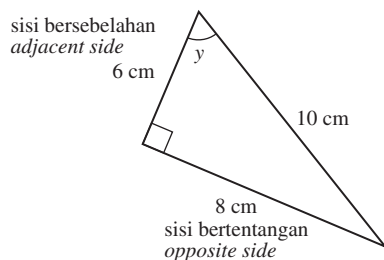
$$\cos m = \frac{\text{sisi bersebelahan}}{\text{hipotenus}}$$

$$\cos m = \frac{\text{adjacent side}}{\text{hypotenuse}}$$

$$\cos m / \cos m = \frac{a}{c}$$

Jawapan/Answer: C

4

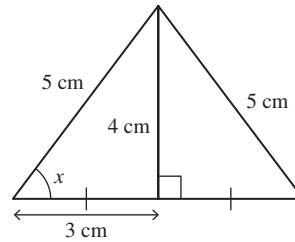


$$\tan y = \frac{\text{sisi bertentangan}}{\text{sisi bersebelahan}} \quad \tan y = \frac{\text{opposite side}}{\text{adjacent side}}$$

$$\tan y = \frac{8}{6} = \frac{4}{3}$$

Jawapan/Answer: A

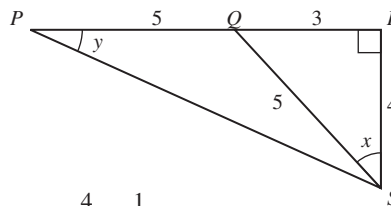
5



$$\sin x = \frac{4}{5}$$

Jawapan/Answer: C

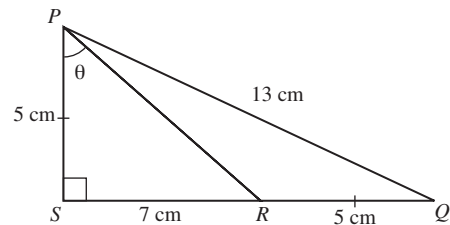
6



$$\tan y = \frac{4}{8} = \frac{1}{2}$$

Jawapan/Answer: D

7



$$QS = \sqrt{13^2 - 5^2} = 12 \text{ cm}$$

$$SR = 7 \text{ cm}$$

$$\tan \theta = \frac{7}{5}$$

Jawapan/Answer: A

8

$$\tan \theta = \frac{12}{5} \quad PR = \sqrt{24^2 + 10^2} = 26 \text{ cm}$$

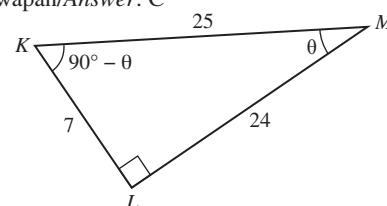
$$\frac{24}{PQ} = \frac{12}{5}$$

$$12 PQ = 120$$

$$PQ = 10 \text{ cm}$$

Jawapan/Answer: C

9



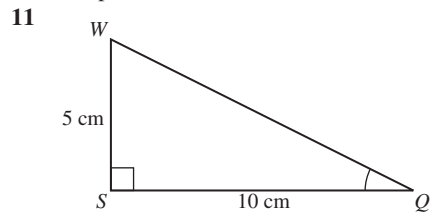
$$LM = \sqrt{25^2 - 7^2} = 24$$

$$\tan(90^\circ - \theta) = \frac{24}{7}$$

Jawapan/Answer: D

$$\begin{aligned} 10 \quad \tan x &= \frac{\sin x}{\cos x} \\ &= \frac{\frac{3}{5}}{\frac{4}{5}} \\ &= \frac{3}{4} \end{aligned}$$

Jawapan/Answer: A

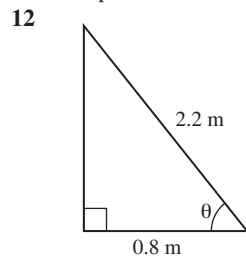


$$\begin{aligned} SQ &= \sqrt{6^2 + 8^2} \\ &= 10 \text{ cm} \end{aligned}$$

$$\tan \angle WQS = \frac{5}{10}$$

$$\begin{aligned} \angle WQS &= \tan^{-1} \frac{5}{10} \\ &= 26.57^\circ \end{aligned}$$

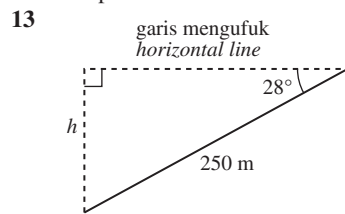
Jawapan/Answer: B



$$\cos \theta = \frac{0.8}{2.2}$$

$$\begin{aligned} \theta &= \cos^{-1} \frac{0.8}{2.2} \\ &= 68^\circ 41' \end{aligned}$$

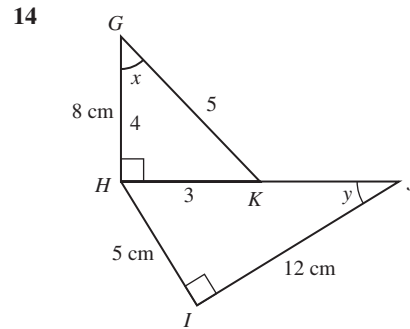
Jawapan/Answer: C



$$\frac{h}{250} = \sin 28^\circ$$

$$\begin{aligned} h &= 250 \sin 28^\circ \\ &= 117.4 \text{ m} \end{aligned}$$

Jawapan/Answer: A

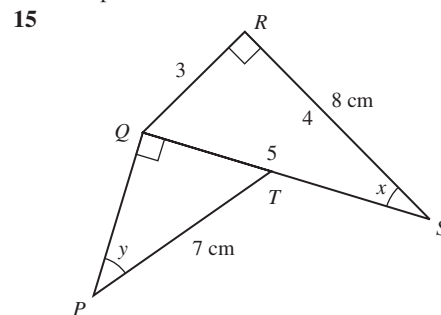


$$HK = 3 \times 2 = 6 \text{ cm}$$

$$\begin{aligned} HJ &= \sqrt{5^2 + 12^2} \\ &= 13 \text{ cm} \end{aligned}$$

$$\begin{aligned} \therefore KJ &= 13 - 6 \\ &= 7 \text{ cm} \end{aligned}$$

Jawapan/Answer: B



$$QS = 5 \times 2 = 10 \text{ cm}$$

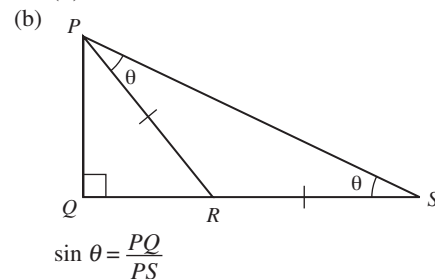
$$QT = \frac{1}{2} \times 10 \text{ cm} = 5 \text{ cm}$$

$$\sin y = \frac{5}{7}$$

Jawapan/Answer: A

### Bahagian B

- 1 (a) (i) *PR*: Hipotenus/*Hypotenuse*  
 (ii) *PQ*: Sisi bersebelahan/*Adjacent side*  
 (b) (i) bertambah/*increase*  
 (ii) berkurang/*decrease*
- 2 (a) (i) Palsu/*False*  
 (ii) Benar/*True*



- 3 (a) (i)  $\sin 45^\circ = \frac{1}{\sqrt{2}}$   
 (ii)  $\tan 60^\circ = \frac{\sqrt{3}}{2}$

(b) (i)  $\cos/\cos \alpha = \frac{4}{5}$   
(ii)  $\tan \beta = \frac{8}{15}$

**Bahagian C**

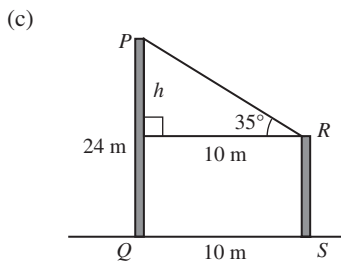
1 (a)  $LN = \sqrt{13^2 - 5^2}$   
 $= 12 \text{ cm}$

$MN = \frac{1}{2} \times LN$   
 $= \frac{1}{2} \times 12 \text{ cm}$   
 $= 6 \text{ cm}$

$\tan x = \frac{MN}{JN}$   
 $= \frac{6}{5}$

(b)  $\angle BAC = 90^\circ - x$   
 $\therefore \angle AED = x$

$\triangle ADE$ ,  $\tan x = \frac{3}{4}$   
 $x = \tan^{-1} \frac{3}{4}$   
 $= 36.87^\circ$  atau/or  $36^\circ 52'$



$\tan 35^\circ = \frac{h}{10}$   
 $h = 10 \tan 35^\circ$   
 $= 7 \text{ m}$   
 $RS = 24 - 7$   
 $= 17 \text{ m}$

2 (a)  $\tan x = \frac{\sin x}{\cos/\cos x}$   
 $\cos/\cos x = \frac{\sin x}{\tan x}$   
 $= \frac{0.77}{1.2}$   
 $= 0.6417$

(b) (i)  $\sin y = \frac{3}{5} = \frac{9 \text{ cm}}{CD}$   
 $3CD = 45$   
 $CD = 15 \text{ cm}$   
 $AC = \sqrt{15^2 - 9^2} = 12 \text{ cm}$   
 $\tan y = \frac{9}{12} = \frac{3}{4}$

(ii)  $\cos/\cos x = \frac{5}{8} = \frac{AB}{AC}$   
 $\frac{5}{8} = \frac{AB}{AC}$

$AB = \frac{5}{8} \times 12$   
 $= 7.5 \text{ cm}$

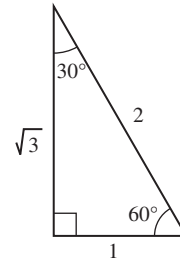
(c) (i)  $AC = \sqrt{17^2 - 8^2} = 15 \text{ cm}$

$\sin x = \frac{15}{17}$

(ii)  $AB = \sqrt{15^2 - 9^2}$   
 $= 12 \text{ cm}$

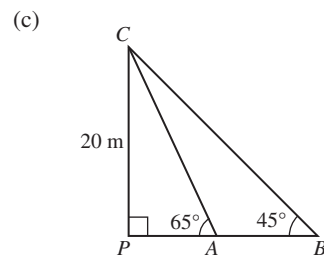
3 (a)  $\cos/\cos 30^\circ + \sin 60^\circ$

$= \frac{\sqrt{3}}{2} + \frac{\sqrt{3}}{2}$   
 $= \sqrt{3}$



(b)  $\cos/\cos x = \frac{4}{5}$   
 $x = \cos^{-1}/\cos^{-1} \frac{4}{5}$   
 $x = 36^\circ 52'$

$\cos x = \frac{4}{5}$   
 $\frac{QS}{20} = \frac{4}{5}$   
 $QS = 16 \text{ cm}$   
 $RS = \sqrt{13^2 - 12^2}$   
 $= 5 \text{ cm}$   
 $QR = QS - RS$   
 $= 16 - 5$   
 $= 11 \text{ cm}$



$\tan 65^\circ = \frac{20}{PA}$   
 $PA = \frac{20}{\tan 65^\circ} = 9.326 \text{ m}$   
 $\tan 45^\circ = \frac{20}{PB}$   
 $PB = \frac{20}{\tan 45^\circ} = 20 \text{ m}$   
 $\therefore AB = PB - PA$   
 $= 20 - 9.326$   
 $= 10.674 \text{ m}$