## CHAPTER 9: TRIGONOMETRY II

## (4) Paper 1

1. In the diagram, $M$ is the midpoint of the straight line $P Q$.


The value of $\cos x$ is
A $\frac{5}{13}$
C $\quad \frac{5}{12}$
B $\quad \frac{12}{13}$
D $\frac{12}{5}$
2. The diagram shows a right-angled triangle $X Y Z$ with $M$ as the midpoint of $X Y$.

Clone
SPM
2006


Given $M Z=10 \mathrm{~cm}$ and $X Y=12 \mathrm{~cm}$, find the value of $\tan \theta$.
A $-\frac{3}{5}$
C $\quad-\frac{4}{5}$
B $-\frac{3}{4}$
D $-\frac{4}{3}$
3. Which of the following represents the graph of $y=\cos x$ for $90^{\circ} \leq x \leq 270^{\circ}$ ?

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A

C

B

D

4. In the diagram, $P M Q R$ is a straight line such that $M$ is the midpoint of $P Q$.


Given that $\tan x^{\circ}=\frac{7}{12}$, find the value of $\cos y^{\circ}$.
A $-\frac{7}{25}$
C $\quad-\frac{7}{24}$
B $-\frac{24}{25}$
D $\quad-\frac{25}{24}$
5. In the diagram, $P Q R$ and $S T Q$ are straight lines. It is given that $\cos x=\frac{4}{5}$ and $\tan y=2$.


Find the length of the straight line $P Q R$, in cm .
A 13
C 15
B $\quad 14$
D 16
6. The diagram shows part of the graph of $y=\sin x$.


The value of $p$ is
A $90^{\circ}$
C $\quad 270^{\circ}$
B $180^{\circ}$
D $360^{\circ}$

