

Topic : Fundamentals of Mathematics

Type of Questions

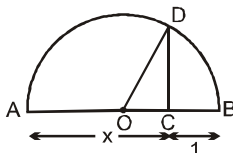
M.M., Min.

Subjective Questions (no negative marking) Q.1 to Q.6

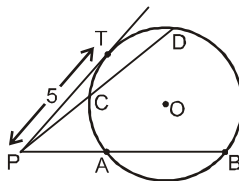
(4 marks, 5 min.)

[24, 30]

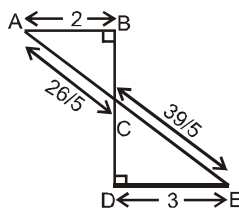
1. Find the value of CD in terms of x, in the adjoining figure, where O is the centre of semicircle.



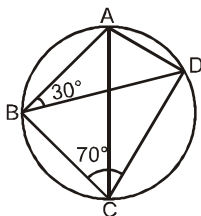
2. In the given figure (circle), $PT = 5$, $PD = 7$ and $PA = 2$, then the value of $PB - PC = ?$



3. In the adjoining figure find the value of BD.



4. Let ABCD is a cyclic quadrilateral. Then, find the $\angle ADB$.



5. Plot the straight lines on the co-ordinate axes.

(i) $y = x$

(ii) $y = -x$

(iii) $y = x + 1$

6. Convert into 'perfect square + some constant'.

(i) $x^2 + x$

(ii) $x^2 + 3x$

Answers Key

1. \sqrt{x} 2. $\frac{125}{14}$ 3. 12 4. 40°