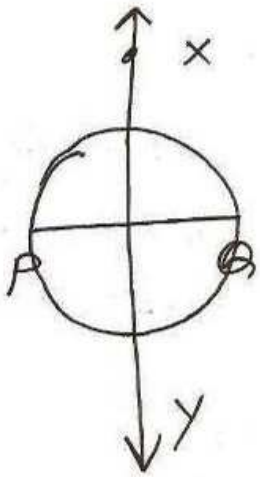
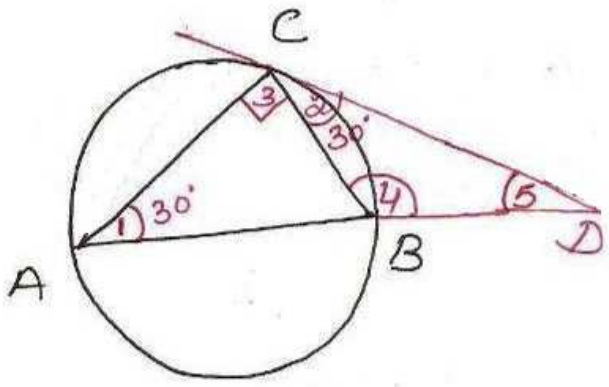
(9)



XY is perpendicular bisector of PQ (chord)
XY passes through the centre of ⊙

True.

(10)



$\angle 2 = \angle 1 = 30^\circ$ [angles in alternate segment]

$\angle 3 = 90^\circ$ [angle in Semi ⊙]

$\angle 4 = \angle 1 + \angle 3$ [exterior angle prop. of Δ]
$= 30^\circ + 90^\circ$
$= 120^\circ$

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$\angle 5 = 180^\circ - (\angle 2 + \angle 4)$ [angle sum prop of Δ]
$= 180 - (30 + 120)$
$= 180 - 150$
$= 30^\circ$

$\therefore \angle 2 = \angle 5$ (30° each)

$\Rightarrow$ BD = BC (converse of isos. Δ prop.)