

$OA = 3\text{cm}$
 $2(OA) = 6\text{cm}$
 $OD = 2\text{cm}$
 $2(OD) = 4\text{cm}$

[diagonals of $\parallel\text{gm}$ bisect each other]

② no. diagonals of a $\parallel\text{gm}$ bisect each other

[diagonals are \perp in
 (a) square
 (c) kite (d) rhombus]

③ $110 + 80 + 70 + 95$
 $= 355$
 $\neq 360^\circ$

So $110^\circ, 80^\circ, 70^\circ, 95^\circ$ cannot be angles of a $\parallel\text{gm}$.

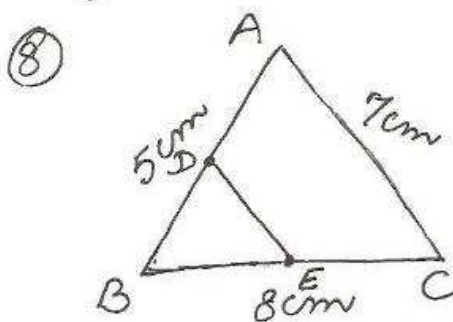
④ $\angle A + \angle D = 180^\circ$
 $\Rightarrow AB \parallel DC$

$\therefore \square ABCD$ can be called a trapezium

⑤ rectangle.
 \therefore each angle $= 90^\circ$

⑥ no. diagonals of a rectangle are not perpendicular

⑦ no.
 \therefore Sum of all 4 angles of $\square = 360^\circ$



DE joins midpoints of sides AB and BC resp.
 $\therefore DE = \frac{1}{2} AC$ [midpt. theorem]
 $= \frac{1}{2} \times 7$
 $= 3.5\text{cm}$

⑨ $\square BDEF$ is a $\parallel\text{gm}$
 $\therefore BD = FE$ (opp sides of a $\parallel\text{gm}$)
 --- (i)

$\square FDCE$ is a $\parallel\text{gm}$
 $\therefore DC = FE$ --- (ii) (do)

From (i) and (ii)
 $BD = CD$

⑩ $ABCD$ is a $\parallel\text{gm}$
 $\therefore \angle A = \angle C = 55^\circ$ (opp \angle s of a $\parallel\text{gm}$)
 $AEGF$ is a $\parallel\text{gm}$
 $\angle A = \angle F = 55^\circ$ (do)