

19 $\angle ACB = \angle ECD$ (vert. opp. \angle s)

$\angle D + 39^\circ + 75^\circ = 180^\circ$ (sum of Δ)

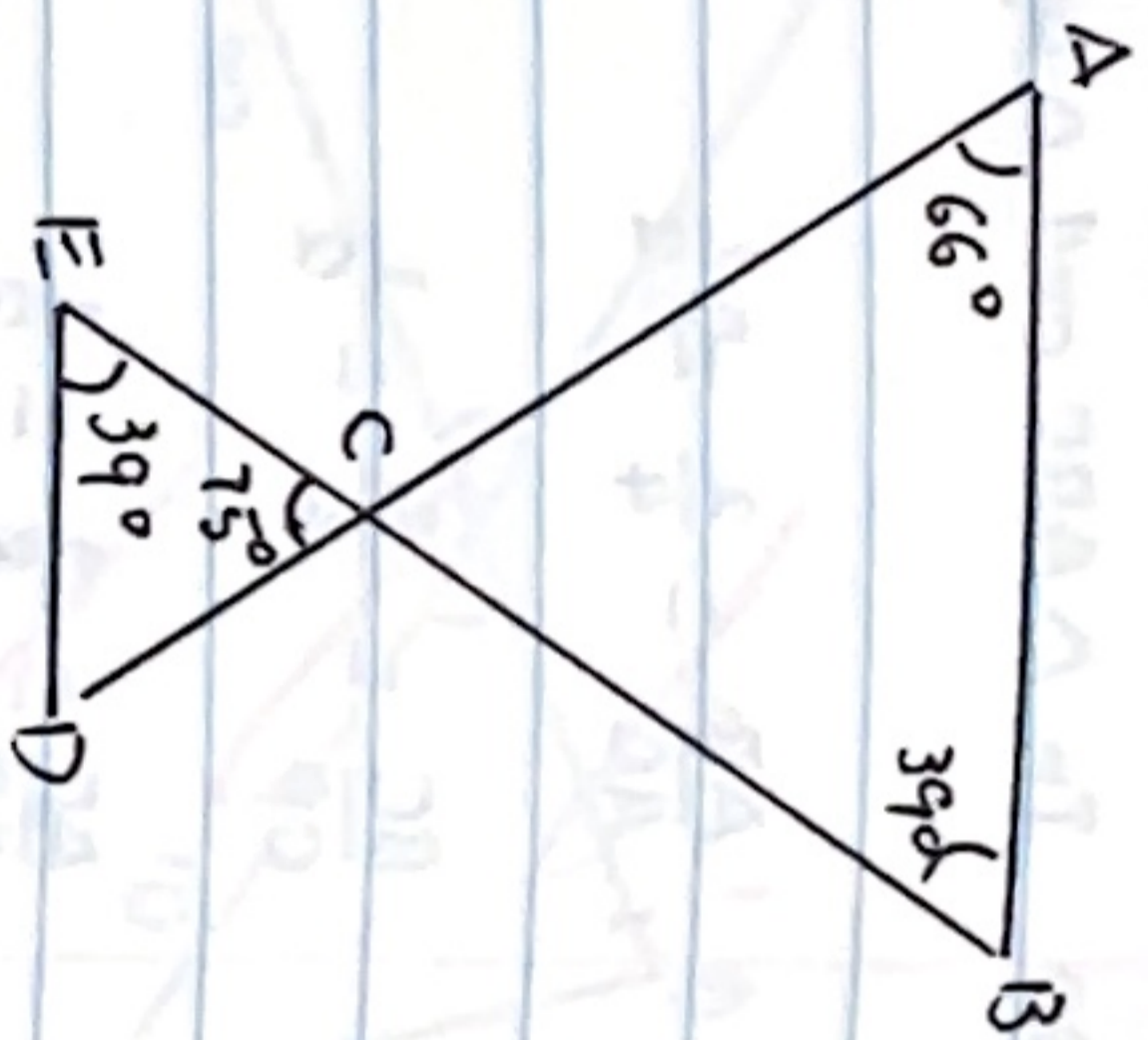
$\angle D = 66^\circ$

$\therefore \angle A = \angle D = 66^\circ$ (corr. \angle s)

$\angle B = \angle E = 39^\circ$ (corr. \angle s)

$\angle BCA = \angle ECD = 75^\circ$ (corr. \angle s)

$\therefore \Delta ABC \sim \Delta DEC$ (AAA)



8 good!
Reason!

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9 EX12.3 (Q24-26)

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24 $\sin 30^\circ = \frac{4}{BD}$

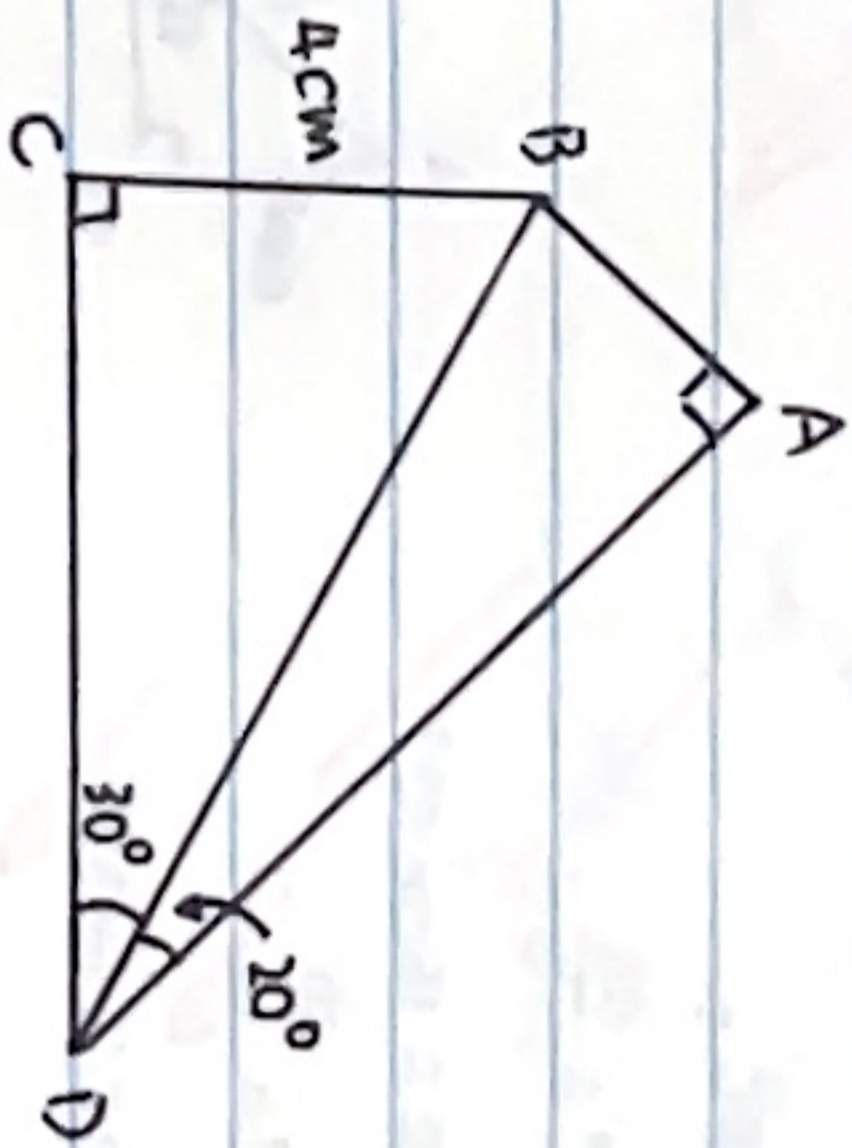
$BD = \frac{4}{\sin 30^\circ}$

$BD = 8$

$\cos 20^\circ = \frac{AD}{8}$

$8 \cos 20^\circ = AD$

$\therefore AD = 7.52 \text{ cm}$



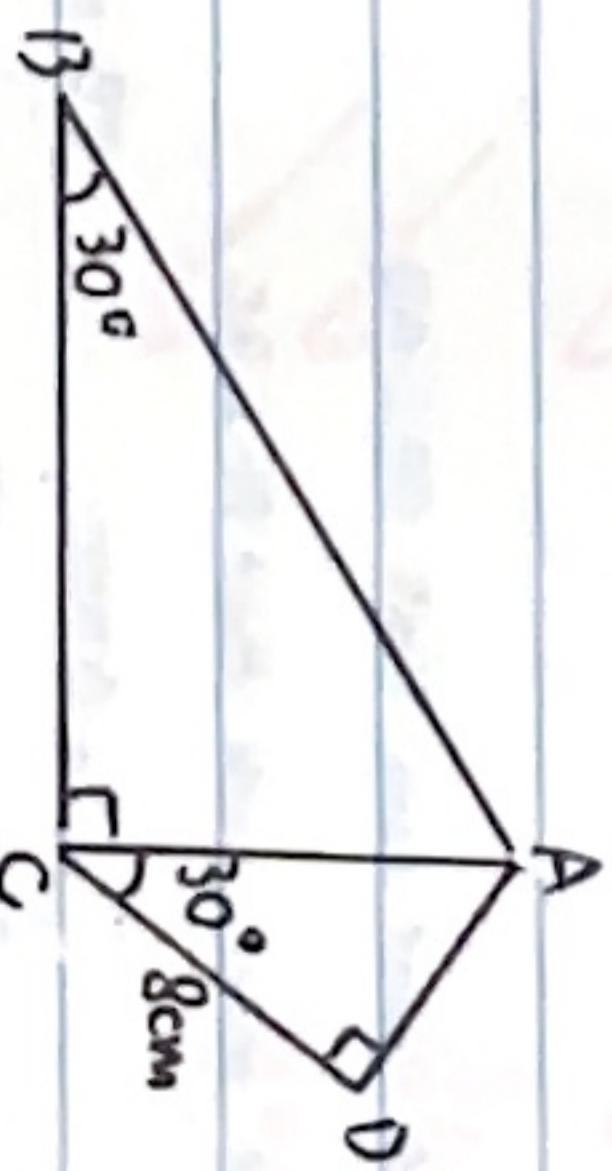
25 $\cos 30^\circ = \frac{8}{AC}$

$AC = \frac{8}{\cos 30^\circ}$

$\tan 30^\circ = \frac{8}{BC}$

$BC = \frac{8}{\tan 30^\circ}$

$\therefore BC = 16 \text{ cm}$



26 $\sin 50^\circ = \frac{AB}{9}$

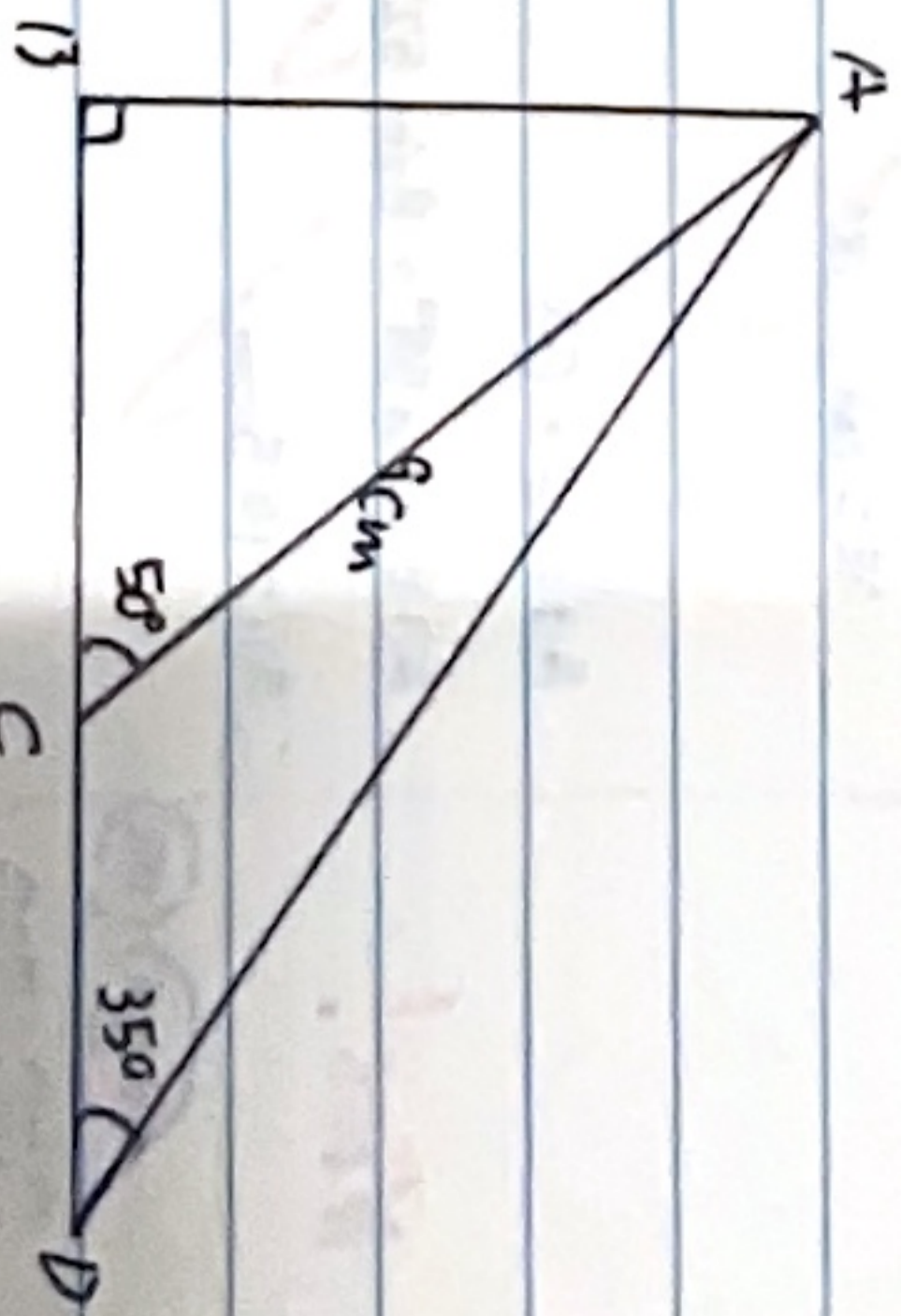
$9 \sin 50^\circ = AB$

$\therefore AB = 6.89$

$\sin 35^\circ = \frac{AD}{9}$

$AD = \frac{9 \sin 50^\circ}{\sin 35^\circ}$

$\therefore AD = 12.0 \text{ cm}$



Perfect!

27 NOV 2025