1. Find ' x ', if:

2. . Find ' x ', if :

3. Find angle ' $A$ ' if:

4. Find angle ' $A$ ' if :

5. Find angle ' $x$ ' if:

6. Find AD, if :

7. Find AD, if :

8. Find $A B$


## Mathematics

9. In trapezium $A B C D$, as shown, $A B \| D C, A D=D C=B C=20 \mathrm{~cm}$ and $\angle A=60^{\circ}$. Find: length of $A B$

10. Use the information given to find the length of $A B$.

11. Find the length of $A B$.

12. In the given figure, AB and EC are parallel to each other. Sides AD and BC are 2 cm each and are perpendicular to AB .


Given that $\angle \mathrm{AED}=60^{\circ}$ and $\angle \mathrm{ACD}=45^{\circ}$. Calculate : AB .
13. Find BC

14. Find $A B$ and $B C$ if :

15. In right-angled triangle $A B C ; \angle B=90^{\circ}$. Find the magnitude of angle $A$, if : $A B$ is $\sqrt{3}$ times of $B C$.
16. In right-angled triangle $A B C ; \angle B=90^{\circ}$. Find the magnitude of angle $A$, if : $B C$ is $\sqrt{3}$ times of $A B$.
17. A ladder is placed against a vertical tower. If the ladder makes an angle of $30^{\circ}$ with the ground and reaches upto a height of 15 m of the tower; find length of the ladder.
18. A kite is attached to a 100 m long string. Find the greatest height reached by the kite when its string makes an angle of $60^{\circ}$ with the level ground.
19. Find PQ , if $\mathrm{AB}=150 \mathrm{~m}, \angle \mathrm{P}=30^{\circ}$ and $\angle \mathrm{Q}=45^{\circ}$.

20. Find $P Q$, if $A B=150 \mathrm{~m}, \angle \mathrm{P}=30^{\circ}$ and $\angle \mathrm{Q}=45^{\circ}$.


