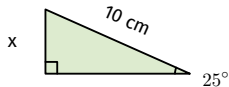


Start Tasks — Answers



Use SOH CAH TOA to find the missing side, labelled x . Give each answer to 3 significant figures.

1.



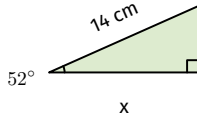
Solution

SOH

$$x = 10 \sin 25^\circ$$

$$x \approx 4.23 \text{ cm}$$

2.



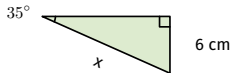
Solution

CAH

$$x = 14 \cos 52^\circ$$

$$x \approx 8.62 \text{ cm}$$

3.



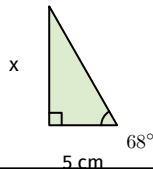
Solution

SOH

$$x = 6 \div \sin 35^\circ$$

$$x \approx 10.5 \text{ cm}$$

4.



Solution

TOA

$$x = 5 \tan 68^\circ$$

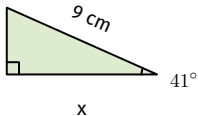
$$x \approx 12.4 \text{ cm}$$

Start Tasks — Answers



Use SOH CAH TOA to find the missing side, labelled x . Give each answer to 3 significant figures.

5.



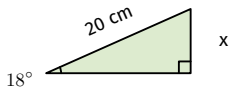
Solution

CAH

$$x = 9 \cos 41^\circ$$

$$x \approx 6.79 \text{ cm}$$

6.



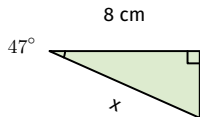
Solution

SOH

$$x = 20 \sin 18^\circ$$

$$x \approx 6.18 \text{ cm}$$

7.



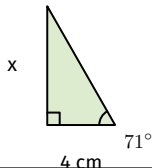
Solution

CAH

$$x = 8 \div \cos 47^\circ$$

$$x \approx 11.7 \text{ cm}$$

8.



Solution

TOA

$$x = 4 \tan 71^\circ$$

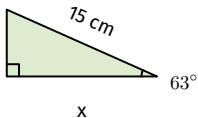
$$x \approx 11.6 \text{ cm}$$

Start Tasks — Answers



Use SOH CAH TOA to find the missing side, labelled x . Give each answer to 3 significant figures.

9.



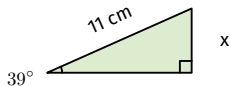
Solution

CAH

$$x = 15 \cos 63^\circ$$

$$x \approx 6.81 \text{ cm}$$

10.



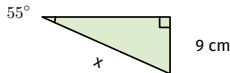
Solution

SOH

$$x = 11 \sin 39^\circ$$

$$x \approx 6.92 \text{ cm}$$

11.



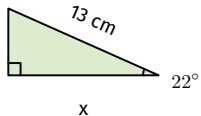
Solution

SOH

$$x = 9 \div \sin 55^\circ$$

$$x \approx 11.0 \text{ cm}$$

12.



Solution

CAH

$$x = 13 \cos 22^\circ$$

$$x \approx 12.1 \text{ cm}$$

Start Tasks — Answers



Use SOH CAH TOA to answer each question. Give each answer to 3 significant figures.

13. A ladder 4.5 m long leans against a wall, making an angle of 58° with the ground. Find the height it reaches up the wall.

Solution

SOH: $\text{height} = 4.5 \sin 58^\circ \approx 3.82 \text{ m}$

14. A skateboard ramp makes an angle of 15° with the ground and has a base length of 6 m along the ground. Find the length of the ramp's sloped surface.

Solution

CAH: $\text{ramp} = 6 \div \cos 15^\circ \approx 6.21 \text{ m}$

15. A kite string makes an angle of 42° with the ground. The kite is directly above a point 20 m, measured horizontally, from the flyer. Find the length of string let out.

Solution

CAH: $\text{string} = 20 \div \cos 42^\circ \approx 26.9 \text{ m}$

16. A wire is attached from the top of a 7 m pole to a point on the ground, making an angle of 50° with the ground. Find the length of the wire.

Solution

SOH: $\text{wire} = 7 \div \sin 50^\circ \approx 9.14 \text{ m}$