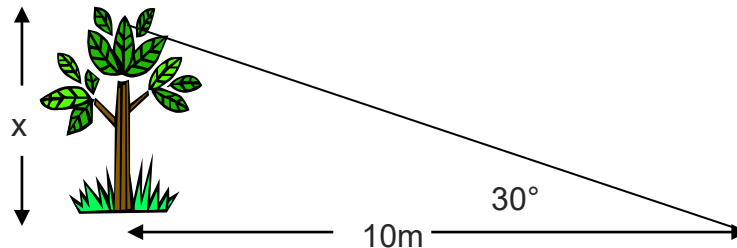


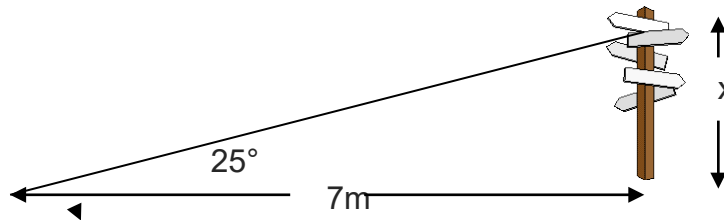
# TRIGONOMETRY – TAN RULE

## SKILLS QUESTIONS

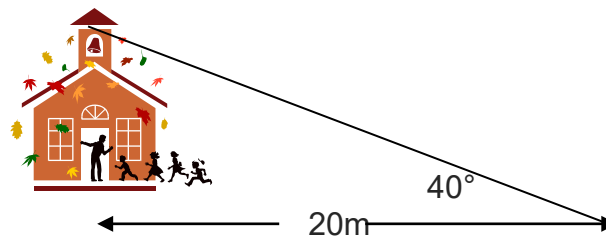
Q1. How high is the tree in the diagram below?



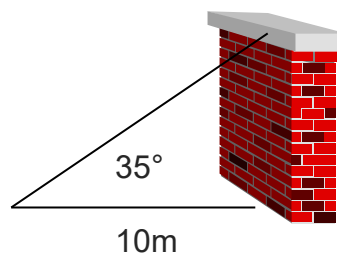
Q2. A shadow is cast 7 metres from the base of the signpost at an angle of  $25^\circ$ . How high is the signpost?



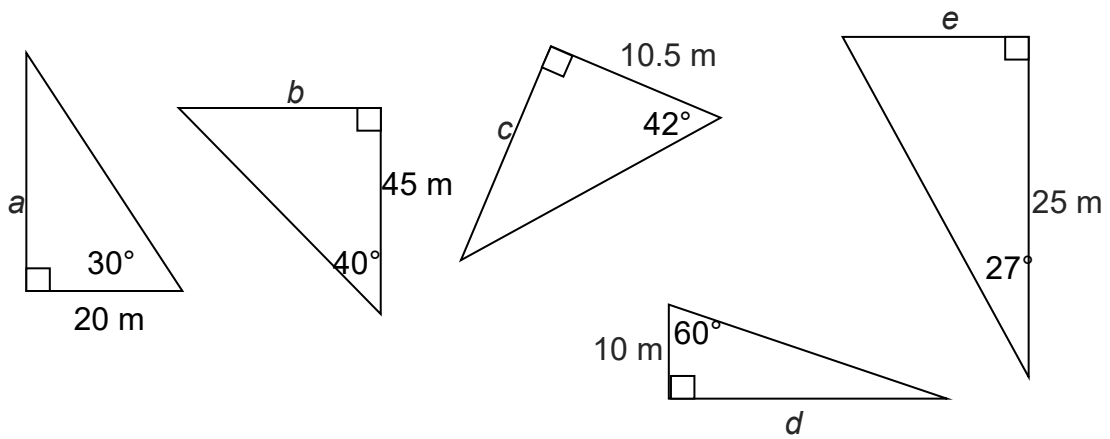
Q9. A person standing 20 metres from the base of the church sees the top of the church spire at an angle of  $40^\circ$ . How high is the church?



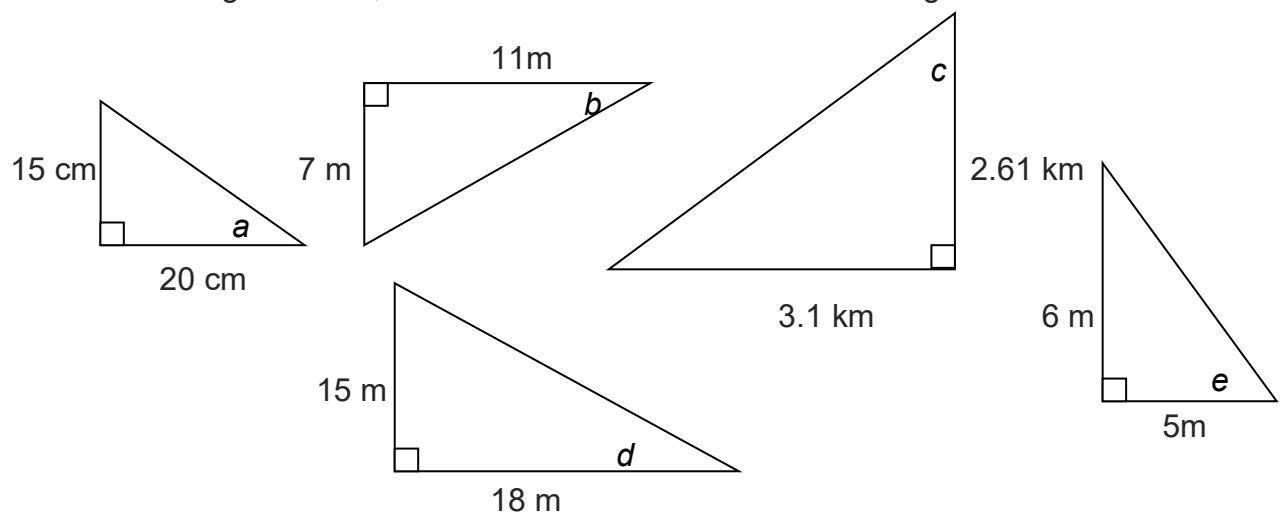
Q4. A brick wall casts a shadow 10 metres long at an angle of  $35^\circ$  with the ground. How high is the wall?



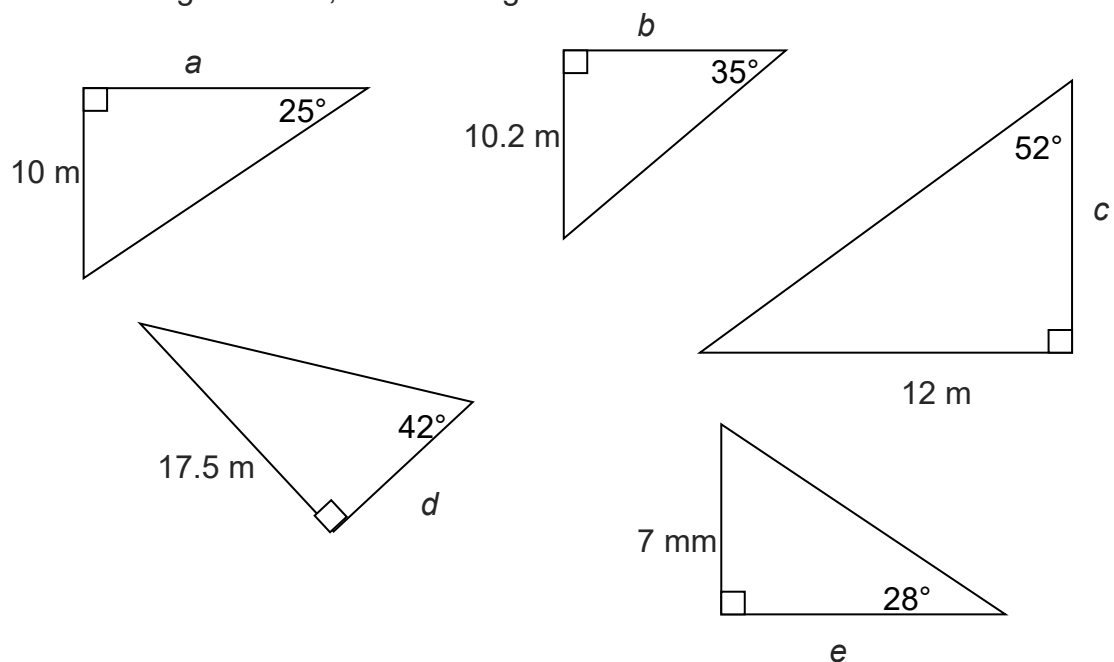
Q5. In the triangles below, calculate the length of the unknown sides.



Q6. In the triangles below, determine the size of the unknown angles.



Q7. In the triangles below, find the length of the unknown sides.



# TAN - ANSWERS

Q1. 5.77 m

Q2. 3.26 m

Q3. 16.78 m

Q4. 7 m

Q5. (a) 11.55 m

(b) 37.76 m

(c) 9.45 m

(d) 17.32 m

(e) 12.74 m

Q6. (a)  $36.9^\circ$

(b)  $32.5^\circ$

(c)  $49.9^\circ$

(d)  $39.8^\circ$

(e)  $39.8^\circ$

Q7. (a) 21.45 m

(b) 14.57 m

(c) 9.38 m

(d) 19.44 m

(e) 13.17 mm