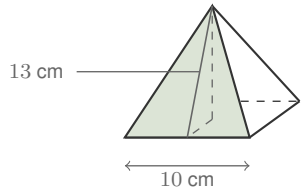
The height of a triangular face is the slant height, measured up the slope. Where it is not given, draw the right-angled triangle and find it. Use the π key unless a question says otherwise. Give answers to one decimal place where they are not exact.

1 A square-based pyramid has base 10 cm and slant height 13 cm.



(a) Find the area of the square base (1)

(b) Find the area of one triangular face (2)

(c) Find the total surface area (2)

(5 marks)

2 A square-based pyramid has base 8 cm and slant height 5 cm. Find its total surface area.

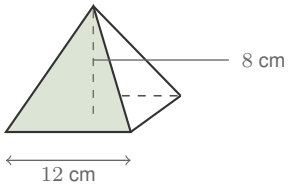
(a) The base (1)

(b) The four triangles (2)

(c) Total (1)

(4 marks)

3 A square-based pyramid has base 12 cm and vertical height 8 cm.



(a) Write down half the length of the base (1)

(b) Find the slant height (2)

(c) Find the area of the four triangles (2)

(d) Find the total surface area (1)

(6 marks)

4 A square-based pyramid has base 6 cm and vertical height 4 cm. Find its total surface area.

(a) The slant height (2)

(b) The four triangles (2)

(c) Total (1)

(5 marks)

5 A square-based pyramid has base 10 cm and vertical height 12 cm. Find its total surface area.

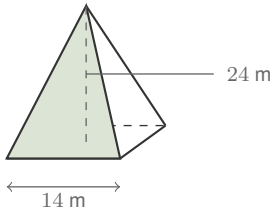
(a) The slant height (2)

(b) The four triangles (2)

(c) Total (1)

(5 marks)

6 A monument is a square-based pyramid of base 14 m and vertical height 24 m. It stands on the ground.



(a) Find the slant height (2)

(b) Find the area of the four sloping faces (2)

(c) The four sloping faces are to be cleaned. **Explain why the base is not included.** (2)

(6 marks)