Word Problems Using Square Roots

Square areas and equal sides in everyday situations.

Name _____ **Date** _____

REMEMBER

Area of a square = side × side

Side length = √area

Solve each problem

Show your working and include the correct units.

1 A square coaster has an area of 36 cm². How long is one side?

Square root / working: _____

Side length: _____ **cm**

2 A square flower bed has an area of 64 m². Find its side length and the total length of edging needed all the way around.

Square root / working: _____

Side: _____ **m** **Edging:** _____ **m**

3 A square picture has an area of 81 cm². How long is each side?

Square root / working: _____

Side length: _____ **cm**

4 A square patio has an area of 100 m². Find its side length, then work out the distance all the way around it.

Square root / working: _____

Side: _____ **m** **Distance around:** _____ **m**

5 A square floor tile has an area of 121 cm². What is the length of each edge?

Square root / working: _____

Edge length: _____ **cm**

6 The school is planning a square play area covering 144 m². How long is one side, and how many metres of fencing will enclose it?

Square root / working: _____

Side: _____ **m** **Fencing:** _____ **m**

Check your answers: Does side length × side length give the area?