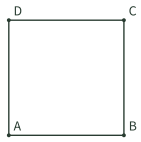
Squares and inclusive quadrilateral classification — Further practice

Year 8, lower volume • text pp. 45–48 • textbook lessons 23–24

Further practice 11

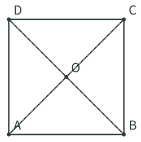
A square has $AC = 4\sqrt{2}$ cm. Find BD.



Geometry diagram; not drawn to scale except for construction tasks.

Further practice 12

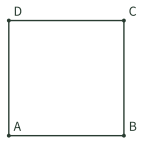
The diagonals of square ABCD meet at O. Find $\angle$AOB and name the inherited property.



Geometry diagram; not drawn to scale except for construction tasks.

Further practice 13

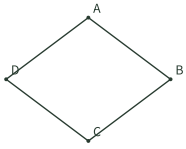
A square has side 4 cm. Find its area and perimeter, keeping the units distinct.



Geometry diagram; not drawn to scale except for construction tasks.

Further practice 14

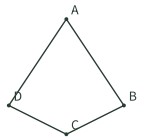
Four equal sides are given in a simple quadrilateral. Is that sufficient for a square?



Geometry diagram; not drawn to scale except for construction tasks.

Extension 15

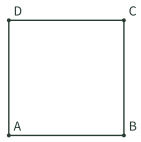
A general quadrilateral has equal, perpendicular diagonals. Must it be a square? Test the shown kite and identify a missing condition.



Geometry diagram; not drawn to scale except for construction tasks.

Extension 16

A parallelogram has equal and perpendicular diagonals. Prove it is a square by using two different criteria.



Geometry diagram; not drawn to scale except for construction tasks.