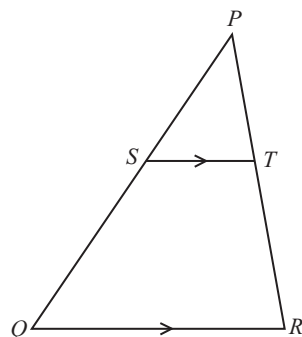


11



NOT TO
SCALE

In the diagram, S lies on PQ and T lies on PR .
 ST is parallel to QR .

- (a) Explain why triangle PQR is mathematically similar to triangle PST .
Give a geometrical reason for each statement you make.

.....

 [3]

- (b) $ST = 3$ cm, $QR = 9$ cm and $PS = 5$ cm.

Work out PQ .

$PQ =$ cm [2]

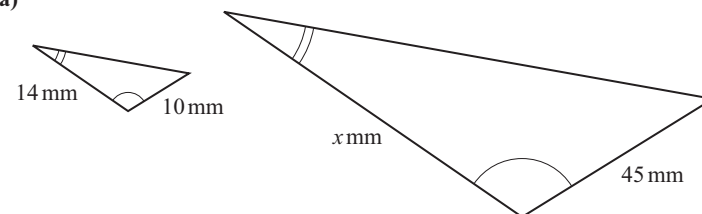
- (c) The area of triangle PST is $2k$ cm².

Find, in terms of k , the area of quadrilateral $QRTS$.

①

..... cm² [2]

22 (a)



NOT TO
SCALE

The diagram shows two mathematically similar triangles.

Find the value of x .

$x =$ [2]

- (b) The surface areas of two mathematically similar containers are 124 cm² and 279 cm².
The capacity of the smaller container is 56 ml.

Find the capacity of the larger container.

..... ml [3]

②