

Diagram **NOT**
accurately drawn

PQR and PTS are straight lines.

Angle $PTQ = \text{Angle } PSR = 90^\circ$

$QT = 4\text{ cm}$

$RS = 12\text{ cm}$

$TS = 10\text{ cm}$

Work out the length of PT .

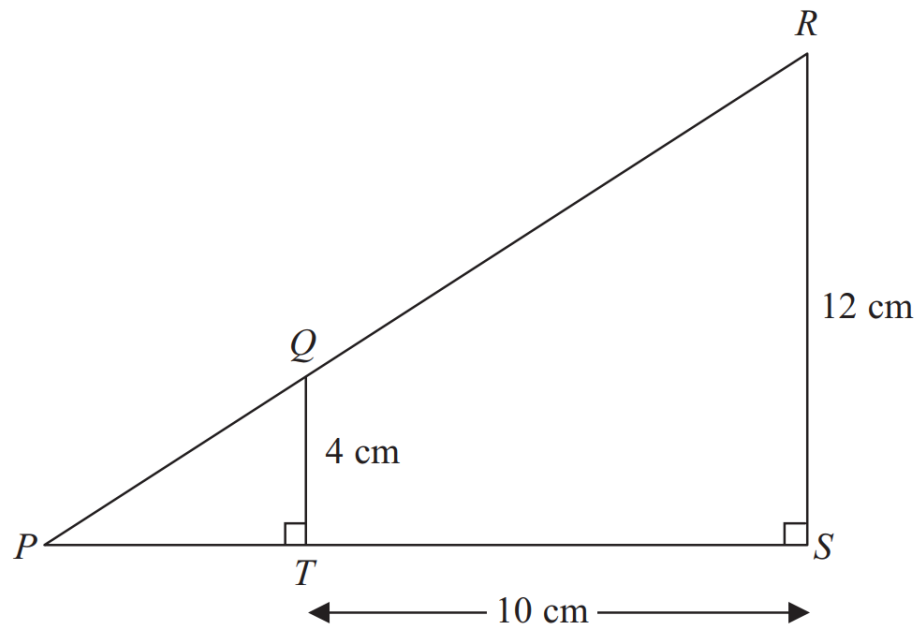


Diagram **NOT**
accurately drawn

PQR and PTS are straight lines.
 Angle $PTQ = \text{Angle } PSR = 90^\circ$
 $QT = 4 \text{ cm}$
 $RS = 12 \text{ cm}$
 $TS = 10 \text{ cm}$

Work out the length of PT .

For example

$$\frac{PT+10}{PT} = \frac{12}{4} = 3$$

$$PT + 10 = 3PT$$

$$2PT = 10$$

5

3

M1 for a correct scale factor or ratio using two corresponding sides from two similar triangles or two sides within the same triangle (may be seen within an equation)

eg. $\frac{12}{4}$ oe **or** $4 : 12$ oe **or** $\frac{PT}{4}$ **or** $\frac{PS}{12}$ **or** $\frac{12}{12-4}$ etc.

M1 for a correct equation with PT or PS as the only variable **or** complete correct method using scale factor

A1 cao