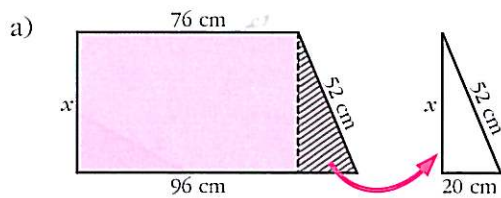


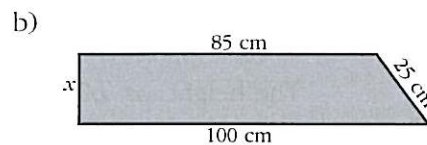
9. Find the length of the unknown side of this right-angled trapezium.



$$x = \sqrt{52^2 - 20^2} = \sqrt{2,704 - 400} =$$

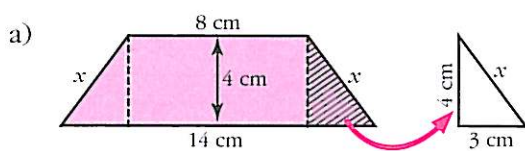
$$= \sqrt{2,304} = 48$$

The unknown side measures 48 cm.



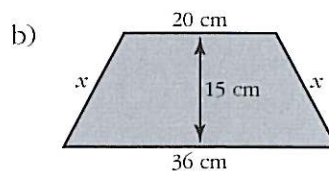
10. The bases of a right-angled trapezium measure 20 m and 38 m. Its height is 13 m. Calculate its perimeter.

11. Find the lengths of the unknown sides of this isosceles trapezium.



$$x = \sqrt{4^2 + 3^2} = \sqrt{16 + 9} = \sqrt{25} = 5$$

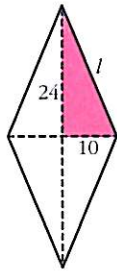
The unknown sides measure 5 cm.



12. The bases of an isosceles trapezium measure 23 cm and 58 cm. The two equal sides measure 21 cm. Calculate its height.

- 13.** Calculate the length of the sides of a rhombus with known diagonals of  $d$  and  $d'$ .

a)  $d = 48$  cm,  $d' = 20$  cm



$$l = \sqrt{24^2 + 10^2} = \sqrt{576 + 100} =$$

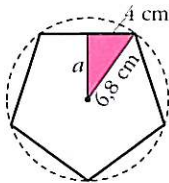
$$= \sqrt{676} = 26$$

The sides measure 26 cm.

b)  $d = 90$  cm,  $d' = 4$  dm

- 14.** Calculate the apothem (short radius) of a regular polygon with a known side of  $l$  and a circumradius of  $r$ .

a) Pentagon:  $l = 8$  cm,  $r = 6.8$  cm

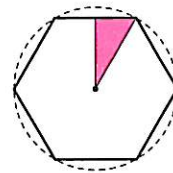


$$a = \sqrt{6.8^2 - 4^2} = \sqrt{46.24 - 16} =$$

$$= \sqrt{30.24} = 5.5$$

The apothem measures 5.5 cm.

b) Hexagon:  $l = 15$  cm,  $r = 15$  cm



- 15.** We know that one diagonal of a rhombus is 80 cm and the length of its sides is 62 cm. Calculate the length of the other diagonal.

- 16.** The side of a regular octagon measures 10 cm and its apothem is 12 cm. How much does the radius of the circumscribed circumference measure?