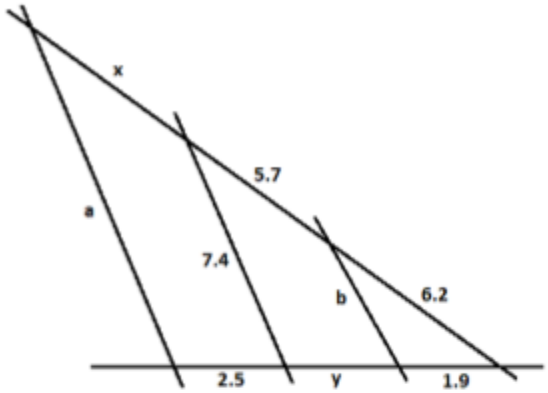
GEOMETRY TEST - 3º ESO

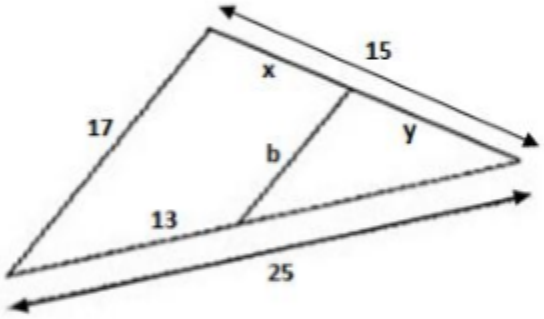
Exercise 1: (1.25 ptos) Find the values of the indeterminates:



$x = 8.16$
$y = 1.75$
$a = 12.47$
$b = 3.86$

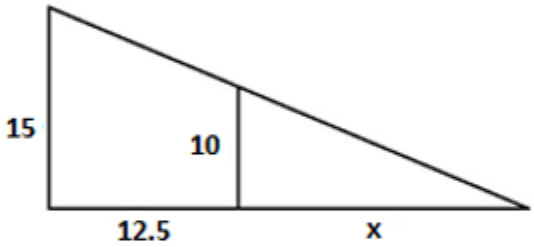
Exercise 2: (2 points) Work out the values of the indeterminates in the following figures:

a)



$x = 7.8 \quad y = 7.2 \quad b = 8.16$

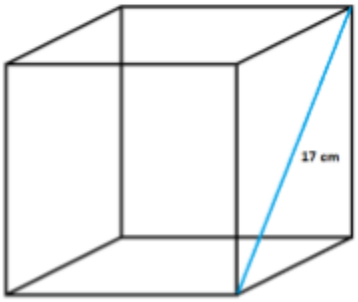
b)



$x = 25$

Exercise 3: (1 point) If I place my bonsai 0.75 m from me and I lie down on the ground, I can hide the 3.4 m oak that's planted at the other side of the garden. If my little bonsai is 37 cm high, what's the distance from the bonsai to the oak. $x = 6.14$ m

Exercise 4: (1.5 points) Find the axial diagonal and the area of a cube if the diagonal of one of the faces measures 17 cm

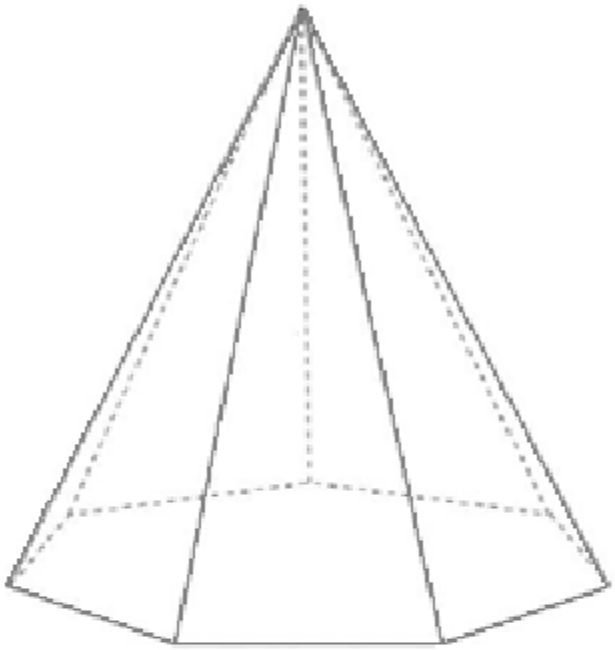


$A = 867 \text{ cm}^2$
$D = 20.82 \text{ cm}$

Exercise 5: (1.25 points) Use Pythagoras' theorem to work out the lengths of the sides of a right-angled triangle if they measure $x+5$, $x+6$, and $x-2$ cm

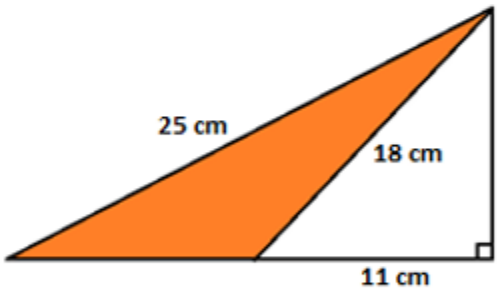
The lengths of the sides are 13 cm, 12 cm and 5 cm

Exercise 6: (2 points) Work out the value of the area of a regular heptagonal pyramid with altitude 10 cm if the length of the side of the base is 13 cm and the edge of the faces measures 17 cm.



$A = 1265.92 \text{ cm}^2$

Exercise 7: (1 point) Work out the area of the shaded triangle



$A = 67.98 \text{ cm}^2$