

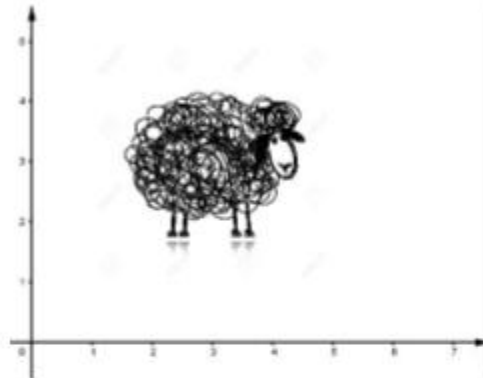


GEOMETRY AND FUNCTIONS TEST



2º ESO

Exercise 1: (0.5 ptos) Plot a graph in the coordinate plane that doesn't represent a function

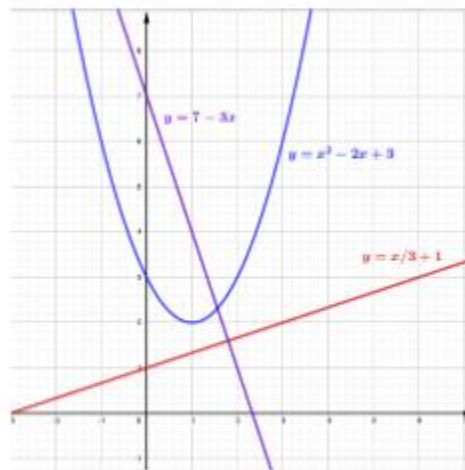


Exercise 2: (2.25 ptos) Plot the following functions using different axes (I'll plot them in the same)

a) $y = 7 - 3x$

b) $y = \frac{x}{3} + 1$

c) $y = x^2 - 2x + 3$



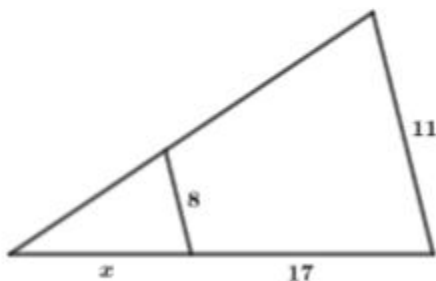
(0.5)

(0.75)

(1)

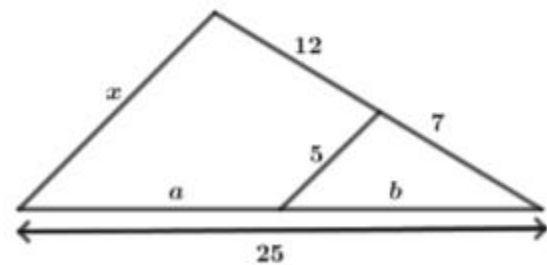
Exercise 3: (2 ptos) Find the values of the indeterminates:

a)



$x = 45.33$

b)

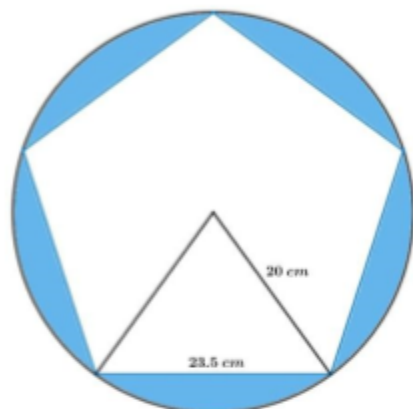


$x = 13.57 \quad b = 9.21 \quad a = 15.79$



Exercise 4: (1.5 ptos) Find the sides of a right-angled triangle if they measure $x-5$, $x-1$ and $x+3$ cm
The sides measure 12 cm, 16 cm and 20 cm

Exercise 5: (1.5 ptos) Find the area of the region between the circle and the pentagon if the side measures 23.5 cm and the radius measures 20 cm (and this time it is true)



$$A = 305.78 \text{ cm}^2$$

Exercise 6: (0.75 ptos) Find the height of the Pelli Tower in Seville if, at a certain moment of a really sunny day our shadows coincide. As you already know I am 1.53 m high (no comments allowed), my shadow measures 95 cm and the shadow of the tower is 112.08 m. Draw a sketch representing the situation.

The tower has a height of 180.51 m

Exercise 7: (1.5 ptos) Find the area between the square and the circle if the side of the square measures 30 cm



$$A = 513.72 \text{ cm}^2$$

PS: I do hate geometry. I always did and I always will.

