

## 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

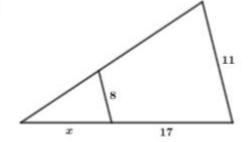
a) 
$$y = 7 - 3x$$
 (0.5)

b) 
$$y = \frac{x}{3} + 1$$
 (0.75)

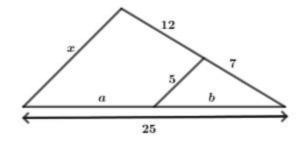
c) 
$$y = x^2 - 2x + 3$$
 (1)

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

a)

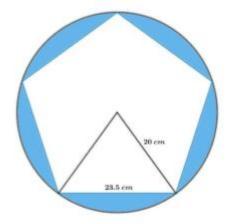


b)



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

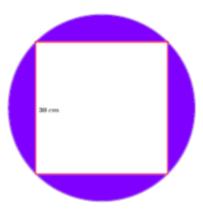
Exercise 5: (1.5 ptos) Find the area of the region between the circle and the pentagon if the side measures 23.5 cm and the radius measures 20 cm (and this time it is true)





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.

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



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

