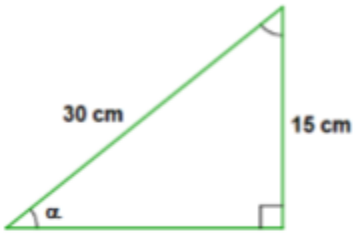
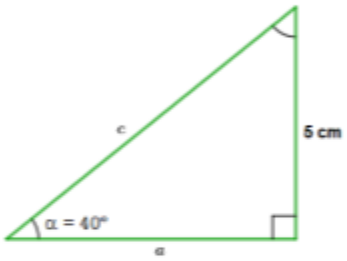
TRIGONOMETRY TEST – 4º ESO

Exercise 1: (2.25 ptos)

a) **(1.5)** Find the six trigonometric functions of the angle α. You cannot use Pythagoras' theorem.



b) **(0.75)** Find the missing sides. You cannot use Pythagoras' theorem.



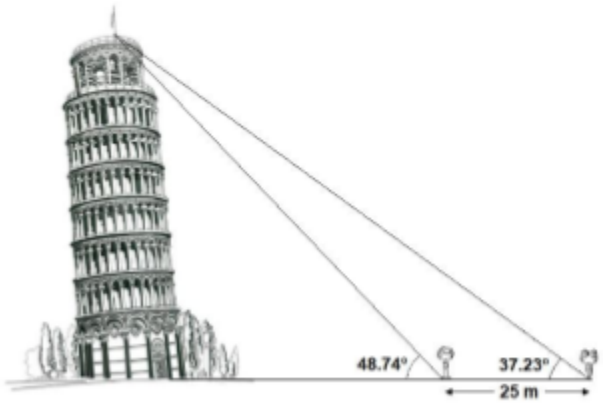
Exercise 2: (1 pto) Find the three principal trigonometric functions (sine, cosine and tangent) of the angle 240°, without using a calculator

Exercise 3: (1.5 ptos) If $\tan\alpha = 3$ and $0° < \alpha < 90°$, find the values of the other five trigonometric functions without using a calculator.

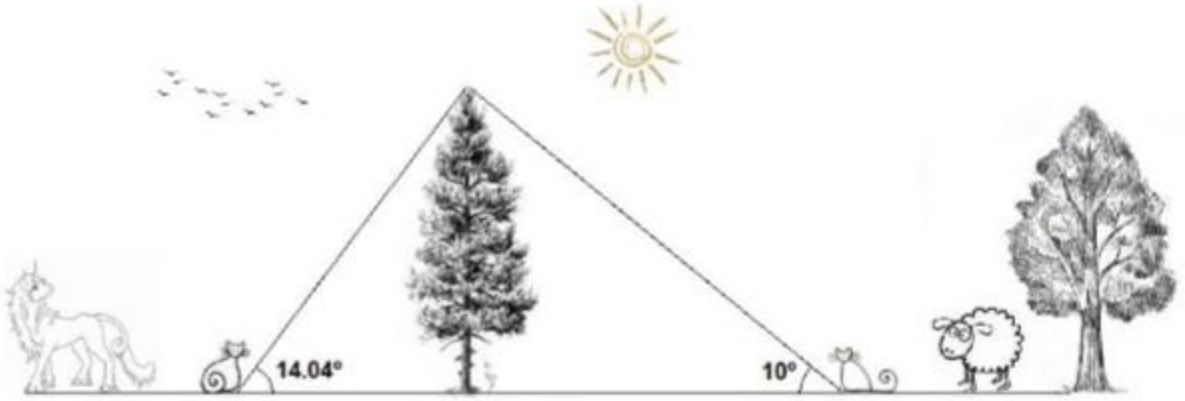
Exercise 4: (1.25 ptos) If $\cos\alpha = 0.62$ and $270° < \alpha < 360°$ find the values of $\sin\alpha$ and $\tan\alpha$ and the value of the angle α

Exercise 5: (1 pto) The base of an isosceles triangle is 40 cm long and the angle between the two equal sides is $30°$. Find the area of the triangle.

Exercise 6: (2 ptos) Find the height of the Leaning Tower of Pisa.



Exercise 7: (1 pto) Find the distance between the cats if the tree is 3 m high



PS: I am bored