GEOMETRY TEST – 2° ESO
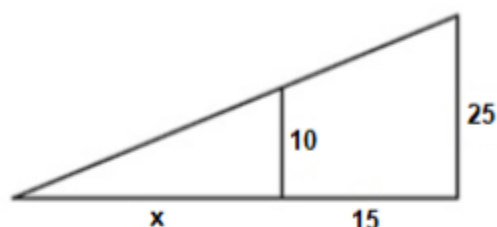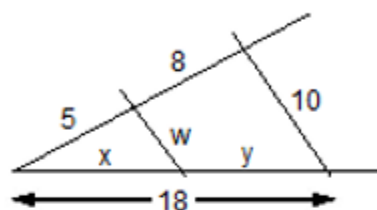
Exercise 1: **(1.5 ptos)** Find the sides of a right-angled triangle knowing that they measure $x-2$, $x+5$ and $x+6$ cm

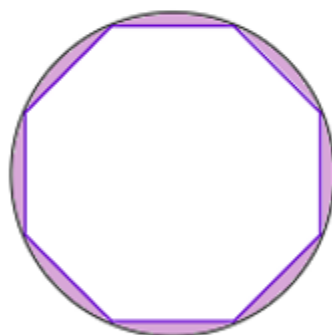**Exercise 2:** **(2 ptos)** Find the value of the unknowns:

a)

b)

Exercise 3: **(0.75 ptos)** Find the height of the Space Needle, in Seattle, if I am standing 50 m away from it and knowing that at a certain moment of the day our shadows coincide. You also have to know that I am 1.55 m high and my shadow measures 42 cm.

Exercise 4: **(1 pto)** Find the area of a right-angled trapezium if the bases measure 15 cm and 25 cm and the slanted side has a length of 17 cm
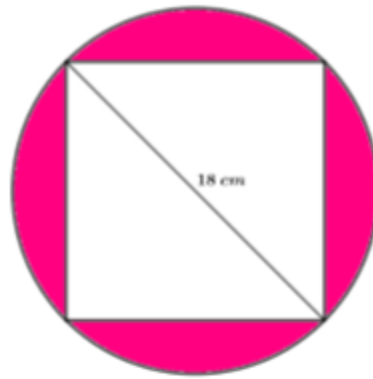
Exercise 5: **(1.25 ptos)** Find the area of the region between a circle and regular octagon with sides of length 5 cm and radius of length 8 cm inscribed within

Exercise 6: **(1.5 ptos)** Find the values of the unknowns:
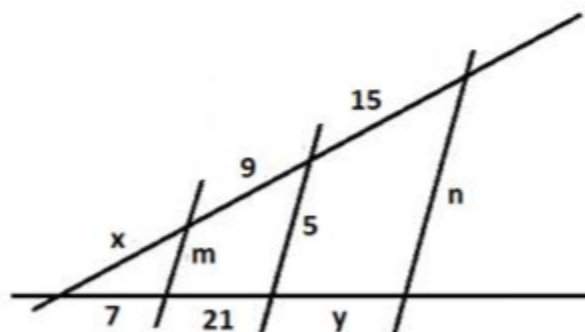
Exercise 7: (1.25 ptos) Find the area of the shadowed region between the circle and the square if its diagonal measures 18 cm

18 cm

Exercise 8: (0.75 ptos) Enunciate Pythagoras' theorem