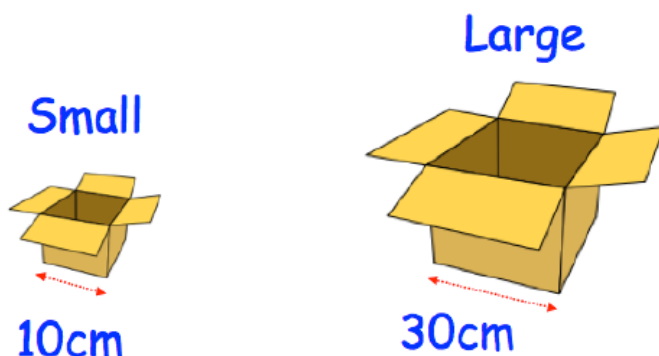


m8 =17 days to go!

7. Shown below are two boxes that are mathematically similar.



The volume of the small box is 500cm^3
Work out the volume of the larger box.

..... cm^3
(2)

2. A circle has centre (0, 0) and radius 6.

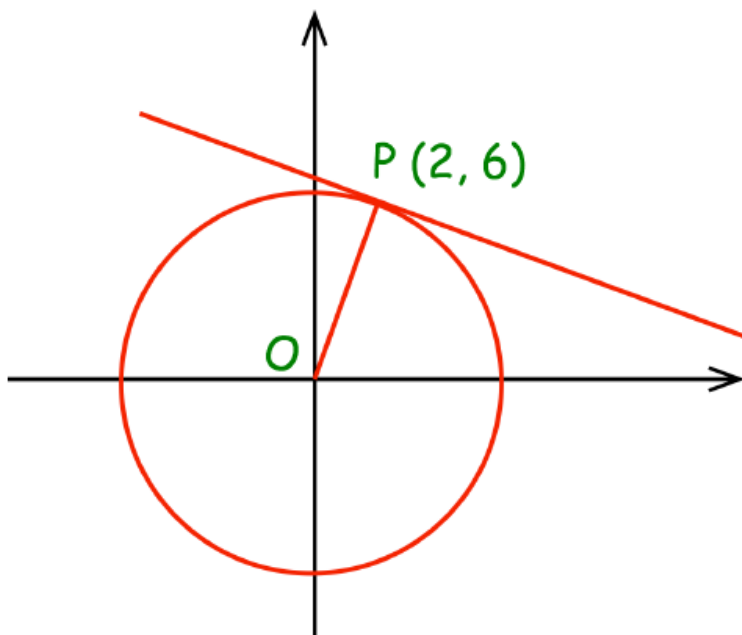
(a) Write down the equation of the circle.

.....
(2)

(b) Does the point (-3, 5) lie on the circle?

.....
(2)

2. The diagram shows the circle $x^2 + y^2 = 40$ with a tangent at the point $(2, 6)$



(a) Find the gradient of the line OP .

.....
(1)

(b) Find the gradient of the tangent

.....
(1)

(c) Find the equation of the tangent

.....
(2)