

Q1. (2017)

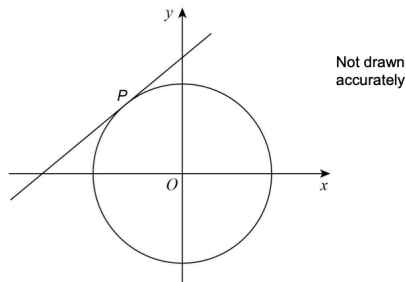
- 20 Work out the diameter of the circle $x^2 + y^2 = 64$
Circle your answer.

[1 mark]

8 16 32 128

Q2. (2017)

- 27 $P(-1, 4)$ is a point on a circle, centre O



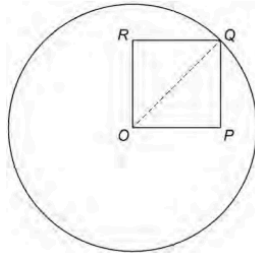
Work out the equation of the tangent to the circle at P .
Give your answer in the form $y = mx + c$

[4 marks]

Q3. (2023)

- 26 A circle, centre O , has circumference 20π cm.
 Q is a point on the circle.
 $OPQR$ is a **square**.

Not drawn accurately



perimeter of the square : circumference of the circle = $\sqrt{a} : \pi$ where a is an integer.

Work out the value of a .

You **must** show your working.

[4 marks]

$a =$ _____