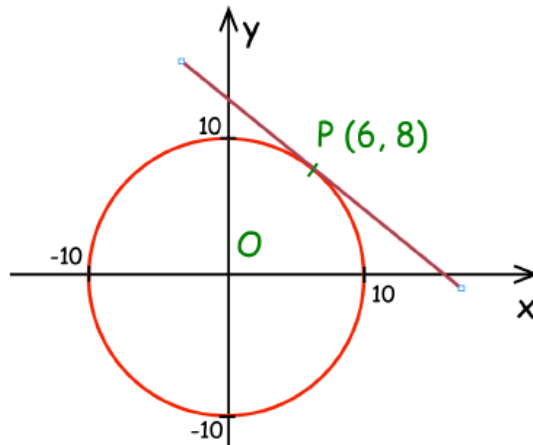


M8 = 9 days to go!

10 Change the recurring decimal $0.727272\dots$ into a fraction in its simplest form.

Answer _____ [2]

5. Here is a circle, centre O, and the tangent to the circle at the point (6, 8).



Find the equation of the tangent at the point P.

.....
(3)

Solve the equations

$$x^2 + y^2 = 20$$

$$x + y = 6$$

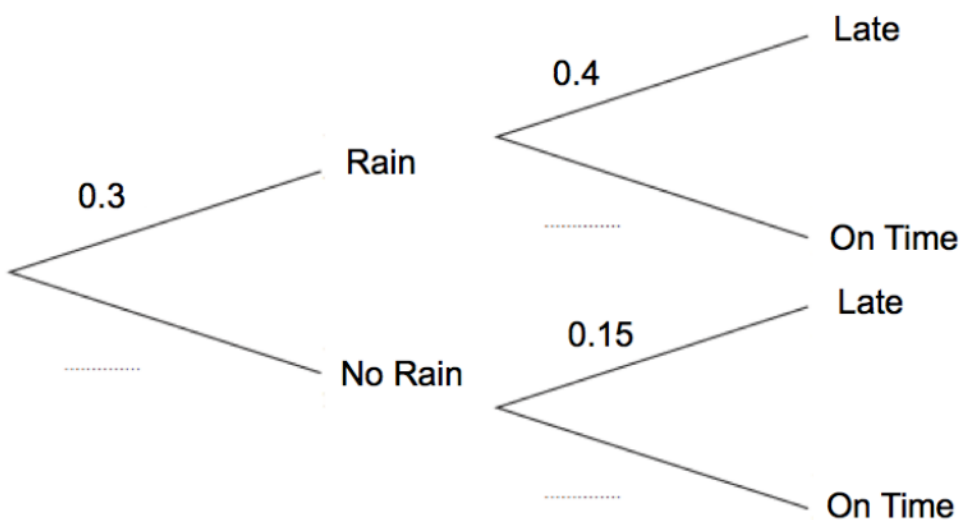
6. In a small village, one bus arrives a day.

The probability of rain in the village is 0.3.

If it rains, the probability of a bus being late is 0.4.

If it does not rain, the probability of a bus being late is 0.15.

- (a) Complete the tree diagram



(2)

- (b) Work out the number of days the bus will be late over a period of 80 days.