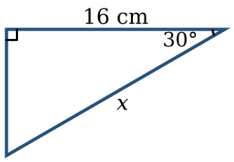
Day 266 **B Tier 10-a-day**

1 8 pens cost £3.60.
(a) Work out the cost of 3 pens.
(b) How many pens can be bought for £3.15?

2 A school has 1102 students. They are put into equal groups of 29.
How many are in each group?

3 £1 = 1.3 dollars
A holiday costs $78.
Work out the cost in pounds.

4 Find the length of x. (Calculator)
Give your answer correct to 1 decimal place.
The diagram is not drawn accurately.



5 A stratified sample of 20 students is taken from the 1000 students in the table.
Work out how many students should be sampled from Year 9.

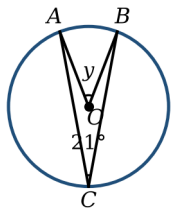
Group	Students
Year 7	400
Year 8	200
Year 9	400

Day 266 **B Tier 10-a-day**

6 Make q the subject of the formula

$p = \frac{q + 11}{2}$

7 A, B and C are points on a circle, centre O.
Angle ACB = 21°.
Work out the size of angle AOB, marked y.
Give a reason for your answer.
The diagram is not drawn accurately.



8 In a sale, all prices are reduced by 20%.
(Calculator)
A jacket costs £192 in the sale.
Work out the original price of the jacket.

9 Show that 6(2n + 1) + 6(2n + 7) is always a multiple of 24, where n is a whole number.

10 $g(x) = 3x^2 + 8$
(a) Work out g(5)
(b) Work out g(−3)