

Q1. (2017)

11 A television channel shows 12 minutes of adverts in each half hour.

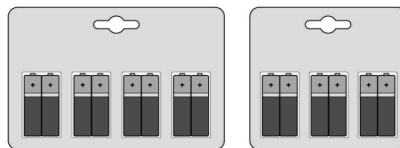
How many **minutes** of adverts does it show from 5 am to 11 pm?

[3 marks]

Answer _____ minutes

Q2. (2017)

18 A shop sells two brands of battery.



Brand A
Pack of 8
Price £3.60

Brand B
Pack of 6
Price £2.94

One brand A battery powers a toy for 5 hours.

One brand B battery powers the same toy for $5\frac{1}{2}$ hours.

Which brand is better value?

You **must** show your working.

[5 marks]

Q3. (2017)

21 Purple paint is made by mixing red paint and blue paint in the ratio 5 : 2

Yan has 30 litres of red paint and 9 litres of blue paint.

What is the **maximum** amount of purple paint he can make?

[3 marks]

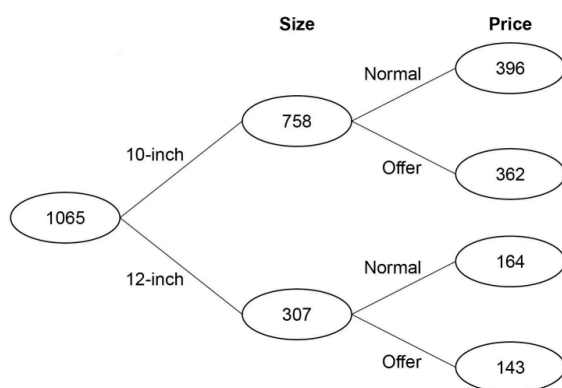
Answer _____ litres

Q4. (2018)

- 12 A takeaway sells 10-inch pizzas and 12-inch pizzas.
Here is some information about the numbers sold in two weeks.

Week 1

10-inch	512
12-inch	231
Total	743

Week 2**(A)**

- 12 (a) In each week a proportion of the pizzas sold were 10-inch.

In which week was this proportion greater?

Show working to support your answer.

[2 marks]**(B)**

- 12 (b) The table shows the profit or loss the takeaway makes on each pizza.

	Normal price	Offer price
10-inch	£3.74 profit	51p loss
12-inch	£5.29 profit	4p loss

In week 1 the total profit was £1895.55

At the end of week 1 the takeaway spent £175 on adverts.

Was the **increase** in profit in week 2 more than the cost of the adverts?

You **must** show your working.

[4 marks]

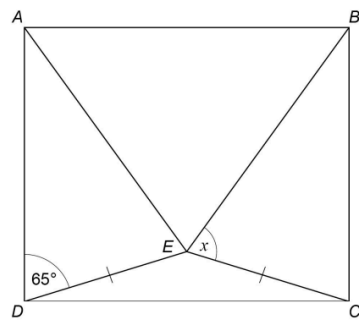
Q5 . (2019)

10

In rectangle $ABCD$

triangle ABE is equilateral

triangle CDE is isosceles, with $CE = DE$



Not drawn
accurately

Work out the size of angle x .

[4 marks]

Answer _____ degrees

Q6. (2021)

10

Boxes of chocolates each contain 25 chocolates.

One box costs £3.25

A shop has a special offer.

Two boxes for £5

How much cheaper **per chocolate** is the special offer?

[3 marks]

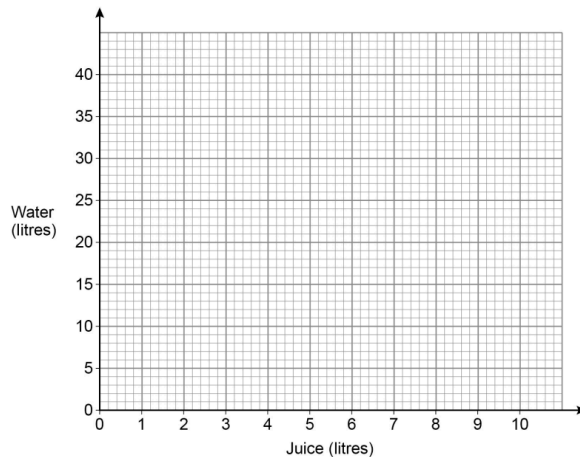
Answer _____ pence

Q7. (2022)

19 Juice and water are mixed together in the ratio 2 : 7

(A)

- 19 (a)** Draw a straight line graph that shows the amounts of juice and water to mix together.
Your graph **must** show up to 10 litres of juice.

[2 marks]

(B)

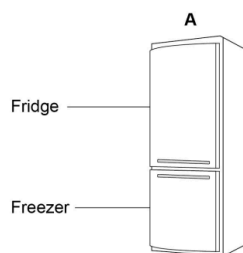
- 19 (b)** How much water needs to be mixed with 5 litres of juice?

[1 mark]

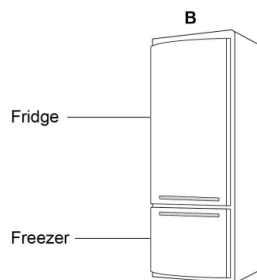
Answer _____ litres

Q8. (2022)

- 27** Information about two fridge-freezers, A and B, is shown.

**Total capacity is 330 litres**

fridge capacity : freezer capacity = 3 : 2

**Fridge capacity is 294 litres**

fridge capacity : freezer capacity = 7 : 3

Q9. (2023)

21

Jing has £2450

She saves some and gives the rest to her four brothers.

money saved : money given to brothers = 2 : 5

She gives each of her **four** brothers the **same** amount.

Does each brother receive more than £430 ?

You **must** show your working.

[4 marks]