

Functional Skills Maths | Level 2

Calculator Short Question Scaffolded Paper 1

1. Marta and Aki want to move into a two-bedroom flat.

Marta will have the bigger bedroom.

The total monthly rent for the flat is £720.

Marta and Aki will share the cost of the rent in the ratio 9 : 7

Marta thinks she will pay less than £400 a month in rent.

Is Marta correct? Show why you think this.

a. How many ratio parts are there in total?

b. How much is one ratio part of the rent?

c. How much will Marta pay in total?

d. Is Marta correct? Show why you think this.

2. Hana wants to buy a new washing machine.

She will use one of these offers.

Offer A

24 monthly payments of £30

Offer B

normal price £954
now 22% off

Hana wants to spend the least amount of money.

Which offer should Hana use? Show why you think this.

- a. How much would Hana pay for Offer A in total?

- b. Find 22% of Offer B.

- c. How much is Offer B with the 22% discount?

- d. Which offer should Hana use and why do you think this?

3. Alya is a baker.

In April she will use 400 kg of flour to make bread.

In May she plans to increase the amount of bread she makes by 14% Alya needs to order the flour she needs to make the bread in May.

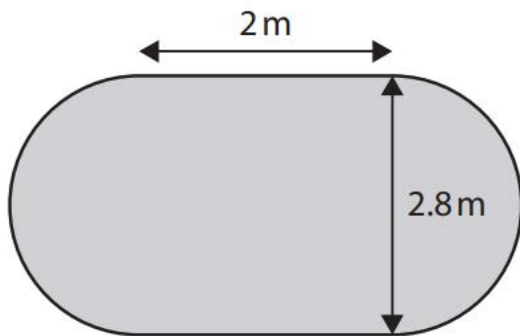
How much flour does Alya need to order to make the bread in May?

- a. Find 14% of 400 kg.

- b. How much flour will Alya need to make the bread in May?

4. Emma hires a large tent for a party.

The diagram shows the shape of the ceiling of the tent. The ceiling is made up of a rectangle and two semi-circles.



Emma wants to put a flower garland around the edge of the ceiling. She has 40 feet in length of flower garland.

Use 1 metre = 3.3 feet

Does Emma have enough flower garland to go around the edge of the ceiling?

a. What is the formula for the circumference of a circle?

b. What is the circumference of the circle?

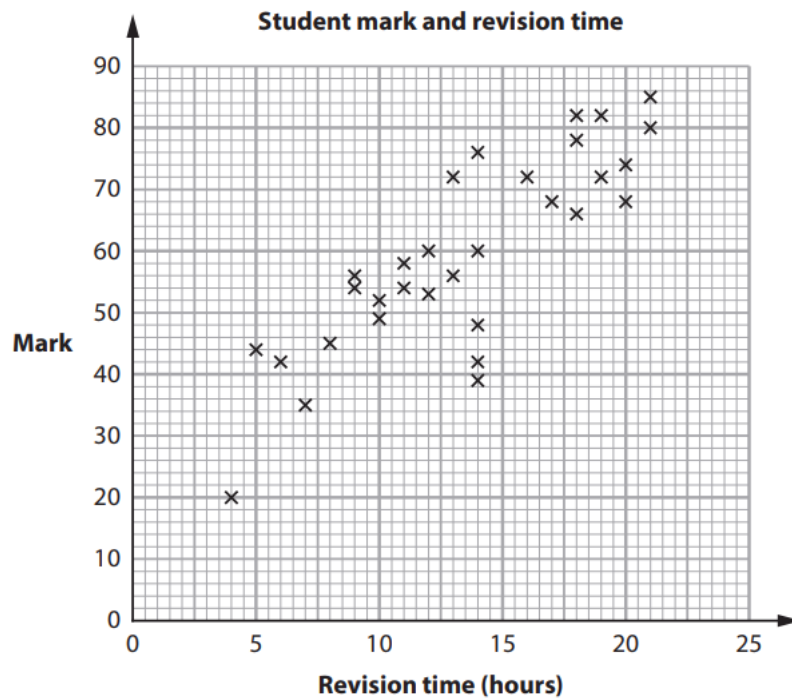
c. What is the perimeter of the ceiling in metres?

d. What is the perimeter of the ceiling in feet?

e. Does Emma have enough flower garland to go around the edge of the ceiling?

5. Ms Daly gives her students one week to prepare for a maths test.

The scatter diagram shows the number of hours spent on revision and the mark in the test for each of 31 students.



Another student revised for 12 hours and scored 45 marks on the test.

- a. Plot this point on the graph above.

- b. What type of correlation does the graph show?

Ms Daly uses the scatter diagram to recommend how much revision time students need to get a high mark on the test.

- c. How many students revised for more than 15 hours?

- d. How many of those students scored more than 70 marks?

- e. What percentage of the students who revised for more than 15 hours scored over 70 marks on the test?

6. Craig works on a building site.

He knows it takes 2 bricklayers 3 hours to lay a total of 450 bricks.

On Monday there are 5 bricklayers at the building site.

All the bricklayers work at the same rate.

How much time would it take 5 bricklayers to lay a total of 450 bricks? Give your answer in hours.

- a. Would it take 1 bricklayer longer than 3 hours to lay a total of 450 bricks?

- b. How long would it take 1 bricklayer to lay 450 bricks?

- c. How long would it take 5 bricklayers to lay 450 bricks?