



Functional Skills Mathematics

Calculator

Diagnostic Assessment

Level 1

Name:

Date:

Tutor:

Vocational Area:

Functional Skills Maths: Diagnostic Assessment

FS Maths Assessment at Level 1

Why are you doing this assessment?

The purpose of this assessment is to find out how we can help you achieve success in your FS Maths. We will use this assessment to identify areas of strength and areas for development with your Maths skills.

On completion of this assessment your tutor will set you individual targets to support the development of your skills.

What you need to do

- Complete the assessment in handwritten form (you may use a calculator on the **designated calculator paper only**)
- You are allowed **60 minutes** to complete the non-calculator paper
- You must clearly show all your working out and calculation methods.

Answer ALL questions. Write your answers in the spaces provided.

1. Write the number 8934 in words

2. If the temperature is -7°C at 12am and increases 9° by 10am. What is the temperature.

Answer _____

3. Write these fractions in ascending order

$$\frac{2}{3} \quad \frac{4}{9} \quad \frac{5}{6}$$

Answer _____

4. Here are ten numbers

8 9 3 4 7 2 8 4 7 2

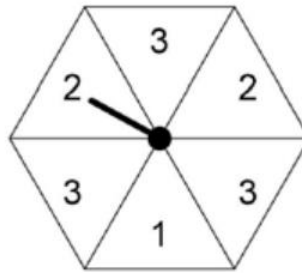
Work out the mean.

Answer _____

5. What is 800 m in kilometres

Answer _____

6. This fair six-sided spinner is spun once



What is the probability of landing on a 2. Give your answer as a fraction.

Answer _____

7. Ryan will drive his car in Spain.

The speedometer in the car shows the speed in miles per hour only.

He will be driving on a road with a speed limit of 100 kilometres per hour.

Ryan uses this rule to find the speed in miles per hour.



Ryan thinks that 70 miles per hour is the same as 100 kilometres per hour.

Is Ryan correct?

Answer _____

8. Charlie works in a beauty salon.

He has three appointments today.

The time needed for each appointment is

- Mrs Green (1 ½ hours)
- Ms. Price (1 hour 20 minutes)
- Sam (3 ¼ hours)

He will have a 45-minute break.

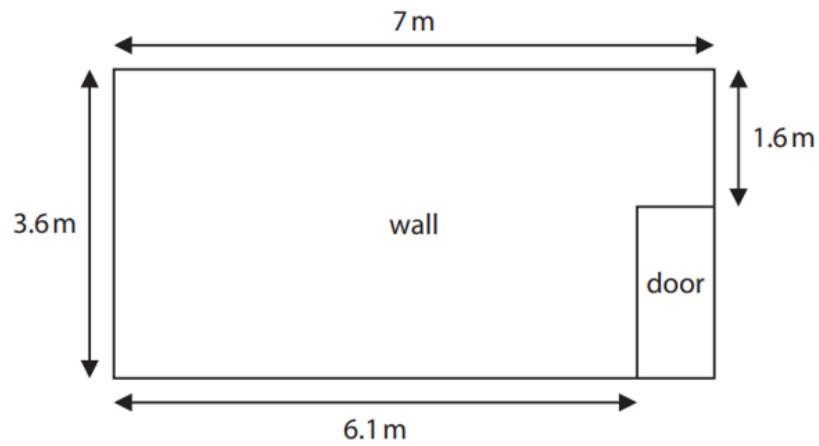
Charlie will start work at 9.15am.

He wants to finish work by 4.30pm.

Will Charlie finish work at 4.30pm?

Answer _____

9. Luke wants to cover this wall in blue paint.



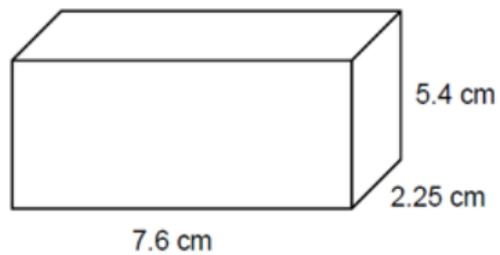
He will buy blue paint in 2.5 litre tins

Each 1 litre of blue paint will cover 8m^2 of the wall.

How many tins of blue paint does Luke need to buy?

Answer _____

10. Work out the volume of the cuboid?



Answer _____ cm^3

11. At a climbing centre there must be a least 1 member of staff of every 7 climbers.

There are 6 members of staff for one session.

23 climbers have booked for this session.

Work out how many **more** climbers can book for this session.

Answer _____

12. List these types of angles in order, with the smallest angle value first

Reflex obtuse acute right angle

Smallest _____

Largest _____

13. Oscar is organising a show.

Visitors to the show choose their seats at random.

There are 350 seats available.

These seats are numbered from 1 to 350

Oscar places a prize under each of the seats numbered 17 to 25

a) What is the probability that the first visitor chooses a seat with a prize?

b) The probability that a visitor buys a soft drink at the show is $\frac{3}{4}$

Which of these describes the probability?

Tick [] a box to show your answer.

[] impossible

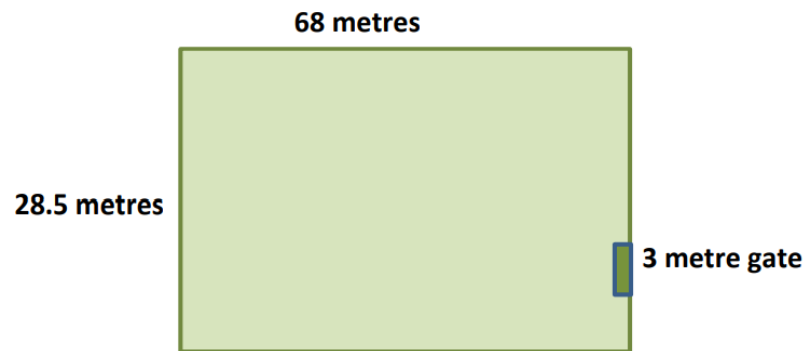
[] unlikely

[] even chance

[] likely

[] certain

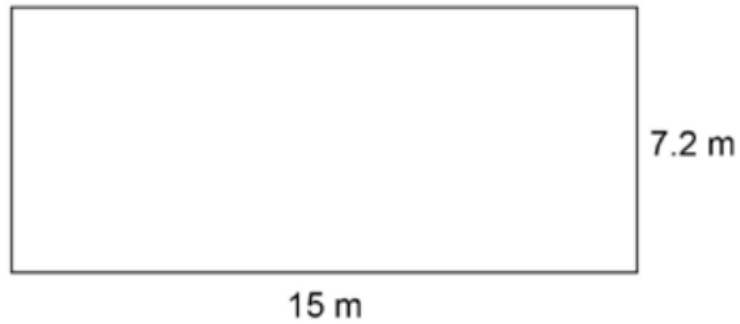
14. Samya is building a fence around this field. The field is rectangular with a 3-metre gap for the entrance gate. How much fencing will she need?



Answer _____

15. Beth is a gardener.

Here is a sketch of a rectangular garden she is designing.



Beth wants to cover one third of the area of the garden with lawn turf.

Lawn turf costs £2.75 per square metre.

It can be cut to fit any area.

Work out the cost of the lawn turf she will need.

Show a check of your answer.

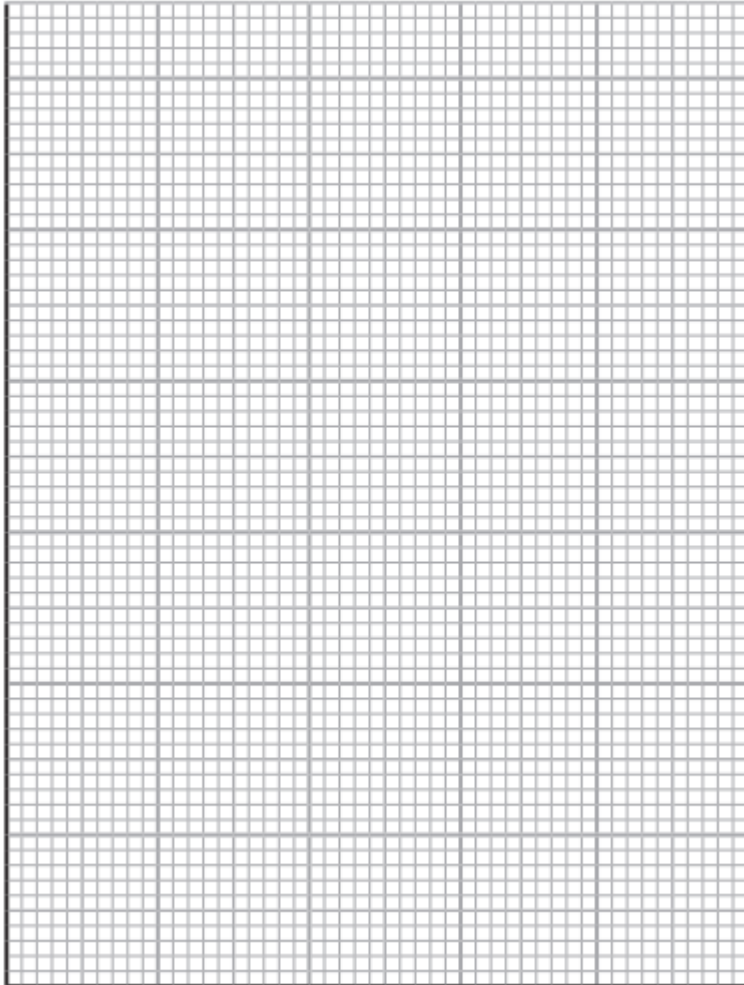
Answer _____

16. Kai works in a call centre

The table shows the number of phone calls he receives each day.

Monday	Tuesday	Wednesday	Thursday	Friday
240	140	185	80	225

Draw a bar chart to display this information.



17. Cruz is the editor of a magazine.

The magazine has 40 pages.

The magazine must have

- 20% of the pages for adverts
- $\frac{1}{4}$ of the pages for photos
- The remaining pages for articles

Work out the number of pages for articles in the magazine.

Answer _____

18. Here is a shape.



How many lines of symmetry does the shape have?

Answer _____