NOCN Functional Skills Mathematics
Level 1 – Reform Sample Paper 1
Assessment Paper

nocn
PART OF nocn GROUP

Functional Skills
Mathematics Assessment
Level 1

There are 2 sections in this assessment, Part A and Part B.

Learner name

_____

Run ID

_____

Learner signature

_____

Centre

_____

Assessment date

_____

Part A - Non-calculator
You have 30 minutes to complete this section.
You <u>must not</u> use a calculator.

Instructions to learners

Part A: Non-calculator

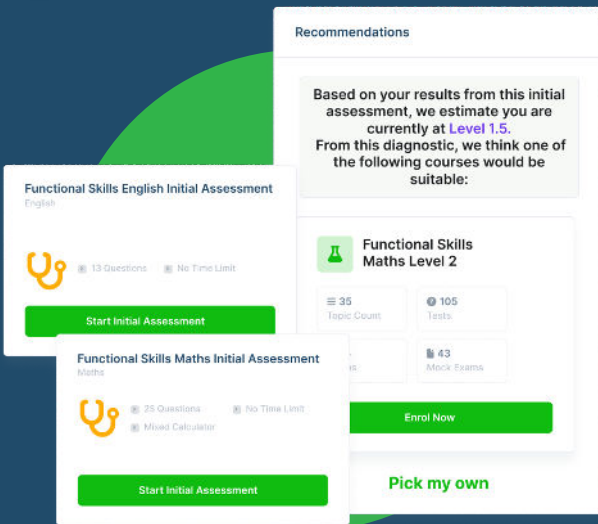You will need a pen, pencil and a ruler. You may need a protractor and compasses.

Use only blue or black ink. Pencil **<u>must only</u>** be used for drawing.

You can write or draw to show your answers.

You have **30 minutes** to complete **Part A**.

FUNCTIONAL SKILLS ONLINE COURSES

Recommendations

Based on your results from this initial assessment, we estimate you are currently at Level 1.5. From this diagnostic, we think one of the following courses would be suitable:

Functional Skills Maths Level 2

- ✅ Your answers are analysed to determine your Current Level
- ✅ Suggested courses for you to enrol on based on your calculated level
- ✅ Always know the level you are currently working at
- ✅ Determine when you are ready to sit your exam

- ✅ Explainer videos on every topic
- ✅ Quick-fire style mutiple choice questions
- ✅ Test your knowledge with exam-style questions
- ✅ Written solutions for all questions
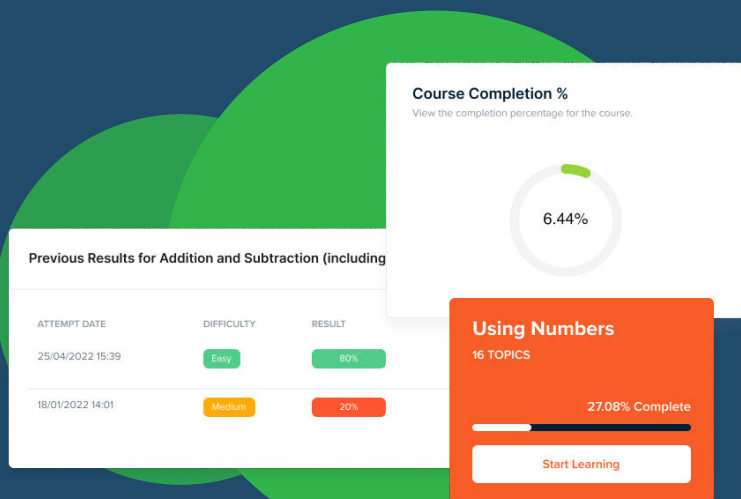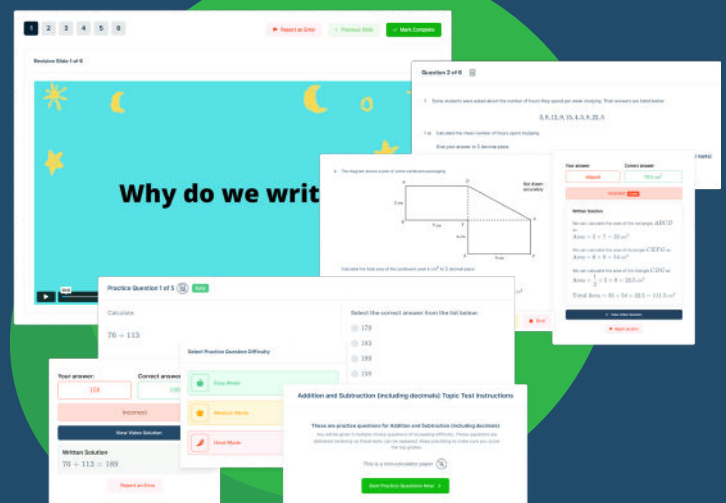
- ✅ See your progress through as you progress through each topic area
- ✅ Get your average scores for practice questions, topic tests and mock exams
- ✅ View all practice question, topic test and mock exam attempts over time
- ✅ View historical attempts to analyse your progress over time

Or visit

passfunctionalskills.co.uk

Question 1

Estimate the answer to 39.856×7.421 by rounding to whole numbers.

Write your answer in the box below. (2 marks)

$$40 \times 7 = 280$$

Answer _____ 280 _____

Question 2

Find the mean of the numbers listed below:

4   1   6   29   3   23

Show your working out and write your answer in the box below. (2 marks)

$$4 + 1 + 6 + 29 + 3 + 23 = 66$$
$$66 \div 6 = 11$$

Answer _____ 11 _____

PassFunctionalSkills.co.uk

Question 3

Show ¼ as a decimal, then a percentage.

Show your answer in the table below.

Fraction	Decimal	Percentage
¼	0·25	25%

Use this box for your working out.   (2 marks)

Question 4

Calculate 5% of £300.

Show your working out and write your answer in the box below.   (2 marks)

$10\% = 300 \div 10 = 30$

$5\% = 30 \div 2 = 15$

Answer £ 15

Question 5

A sports shop records its sale figures for the last 5 months.

May sales are: seventy-two thousand, five hundred and twenty.

	Jan	Feb	Mar	Apr	May
(£)	135,700	87,300	109,600	52,525	72,520

Add the May figure and place sales figures in order starting with the highest.

Write your answer in the grid below.   **(2 marks)**

135,700
109,600
87,300
72,520
52,525

PassFunctionalSkills.co.uk

Question 6

Sharron gets a total of £1050 each month.

She spends 3/10 of this on rent and 2/3 on food and bills.

How much money does Sharron have remaining?

Show your working out and write your answer in the box below.   **(4 marks)**

$1050 \div 10 = 105$

$105 \times 3 = £315$ (rent)

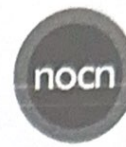$$\begin{array}{r} 356 \\ 3\overline{\smash{)}10^{1}50} \end{array}$$

$1050 \div 3 = 350$

$350 \times 2 = £700$

~~1050~~

$$\begin{array}{r} 315 \\ +700 \\ \hline 1015 \end{array}$$

$$\begin{array}{r} 10\,\overset{4}{\cancel{8}}0 \\ -1015 \\ \hline 0035 \end{array}$$

Answer ___£35___

nocn

PART OF nocn GROUP

End of Part A
Non-calculator

The invigilator will collect this section when the assessment time has elapsed.

The section must be collected by the invigilator before proceeding to Part B.

NOCN Group
Acero Building
1 Concourse Way
Sheaf Street
Sheffield
S1 2BJ

Ofqual Approved
©NOCN

NOCN Functional Skills Mathematics
Level 1 – Reform Sample Paper 1
Assessment Paper

nocn

PART OF nocn GROUP

Functional Skills
Mathematics Assessment
Level 1

Learner name

_____

Run ID

_____

Learner signature

_____

Centre

_____

Assessment date

_____

Part B - Calculator

**You have 1 hour
15 minutes to complete
this section.**

You <u>may</u> use a calculator.
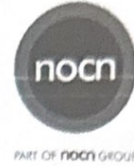
Instructions to learners

Part B: Calculator

You will need a pen, pencil, ruler and a calculator. You may need a protractor and compasses.

Use only blue or black ink. Pencil **<u>must only</u>** be used for drawing.

You can write or draw to show your answers.

You have **1 hour 15 minutes** to complete **Part B**.

PassFunctionalSkills.co.uk

Question 7

Dave owns a shop.

He buys 20 boxes of chocolate bars from a wholesaler to sell in his shop. Each box contains 20 bars.

47 bars are damaged.

Estimate what fraction of bars can be sold. Show the fraction in its lowest form.

Show your working out and write your answer in the box below.   (3 marks)

no. of chocolate bars $= 20 \times 20 = 400$

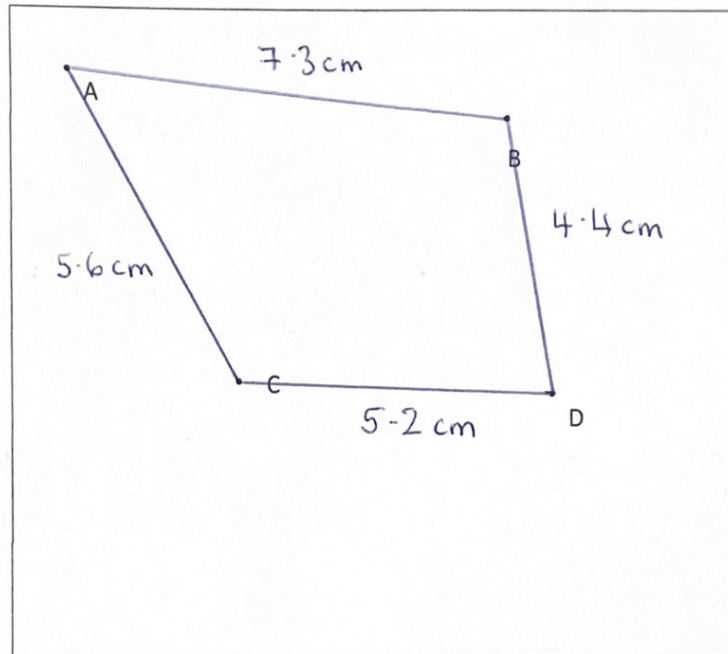estimate for bars damaged $= 50$

$$\frac{50}{400} = \frac{5}{40} = \frac{1}{8}$$

$$1 - \frac{1}{8} = \frac{7}{8}$$

$$\frac{7}{8}$$

Answer_____

Question 8

Paulina is planning a forest walk for her walking club. They will walk from point A to point D. They will need to stop for a water break at either point B or point C.

7.3 cm

4.4 cm

5.6 cm

C

5-2 cm   D

A

B

Scale: 1cm = 5km

What is the length of the shorter route in kilometres?

Show your working out and write your answer in the box below.   **(4 marks)**

$$A \rightarrow B \rightarrow D = 7.3 + 4.4 = 11.7 \text{ cm}$$

$$A \rightarrow C \rightarrow D = 5.6 + 5.2 = 10.8 \text{ cm}$$

Answer _____ A to D via C is quicker _____

Question 9

A youth centre spends the day strawberry picking.

The tubs of strawberries are weighed individually.

Weight of Strawberry Tubs
570g
1kg
0.43kg
1200g
600g

Calculate the total weight of the strawberries. Give your answer in kilograms.

Show your working out and write your answer in the box below. **(2 marks)**

$570 g = 0.57 kg$

$1200 g = 1.2 kg$

$600 g = 0.6 kg$

$0.57 + 1.2 + 0.6 + 1 + 0.43 = 3.8 kg$

3.8

Answer _____ kg

PassFunctionalSkills.co.uk

Question 10

Jason is a delivery driver. He starts and finishes at the warehouse. Each delivery stop that Jason makes will take 20 minutes. Jason has three deliveries to make. Jason's average speed is 40mph.

> Use the formula: **Time** (in hours) = **distance** (in miles) ÷ **average speed** (in mph)

Delivery 1

37 miles   53 miles

Warehouse   Delivery 2

20 miles   40 miles

Delivery 3
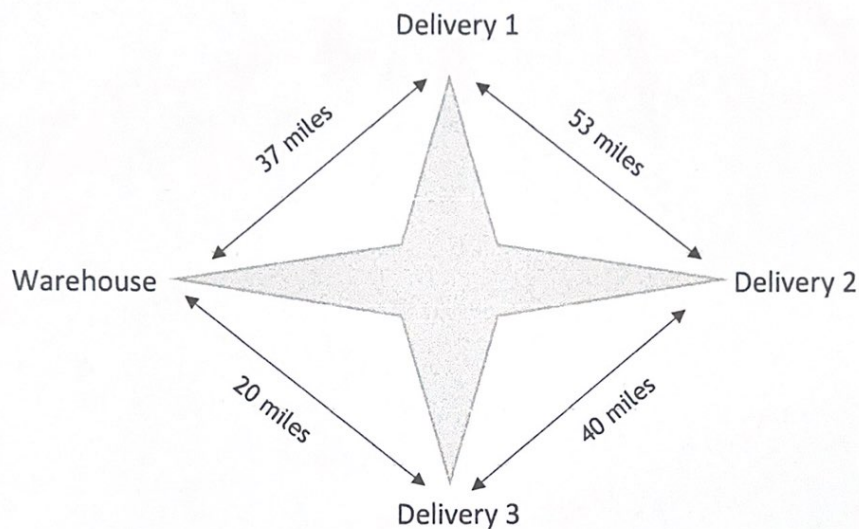
Jason leaves at 9.00am.

What time will Jason get back to the warehouse?

Show your working out and write your answer in the box below.   **(5 marks)**

Total distance = 37 + 53 + 40 + 20 = 150 miles
Time taken driving = 150 ÷ 40 = 3·75 hours
3 stepps = 3 x 20 minutes = 60 minutes

3·75 hrs = 3 hours 45 mins
Total journey time = 4 hours 45 mins

Answer_____Jason will get back at 13:45_____
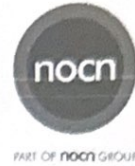
Question 11

Aaron takes 40 minutes to run 5 miles.

He wants to use this information to estimate how long it will take him to run a half marathon.

A half marathon is 13 miles.

What is the estimated time Aaron will take to run the half marathon? Give a reason why this estimate may be unreliable.

Show your working out and write your answer in the box below.   **(4 marks)**

$40 \div 5 = 8$ minutes per mile

$8 \times 13 = 104$ minutes

The estimate may be unreliable because Aaron may not be able to keep that speed up for the entire run.

Answer____104 minutes_____

Question 12

A school needs to cut the grass on the playing fields. They have found two companies who offer a grass cutting service.
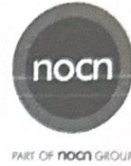
Fresh Cuts	*Green Gardens*
Fixed price £250	Grass cutting 4p per square metre

The diagram below is a plan of the playing fields.
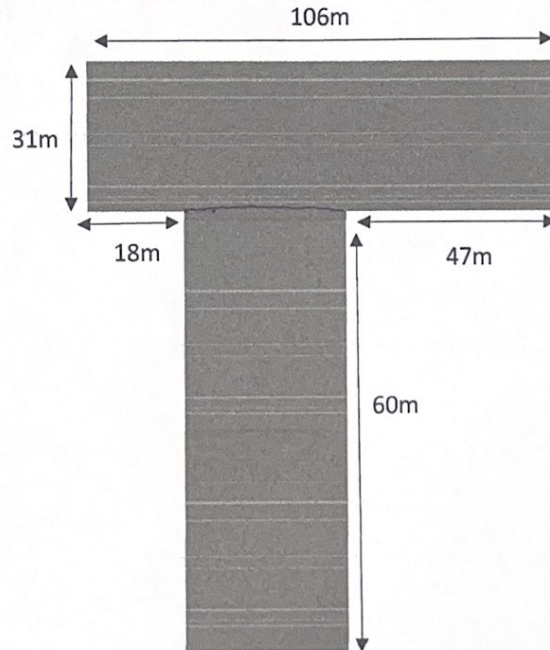
Which company is the cheaper option for the school?

Show your working out and write your answer in the box below.   **(6 marks)**

$106 \times 31 = 3286 \, m^2$
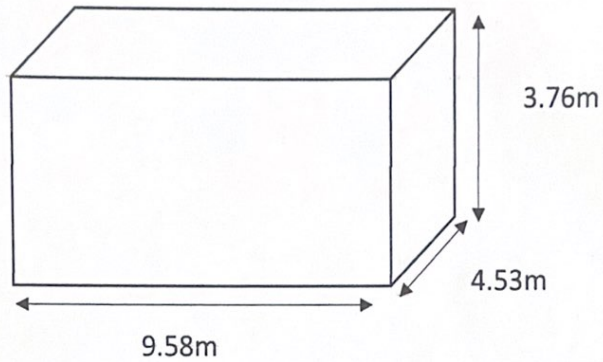
$106 - 18 - 47 = 41$

$41 \times 60 = 2460 \, m^2$

Total area $= 3286 + 2460 = 5746 \, m^2$

$5746 \times 0.04 = £229.84$ (Green Gardens)

Green Gardens is cheaper

Answer _____

Question 13

Calculate the volume of the cuboid below, give your answer to 2dp.

3.76m

4.53m

9.58m

Show your working out and write your answer in the box below.   (3 marks)

$$9.58 \times 3.76 \times 4.53 = 163.174224$$
$$\simeq 163.17 \, m^3$$

Answer _____ $163.17 \, m^3$

PassFunctionalSkills.co.uk

Question 14

Ann looks at her bank statement online; it shows she is overdrawn.
The account balance is:

$$- £375.20$$

Ann knows her monthly wage of £1,525.80 will go into the account today.

What will the balance on the account be after the payment has been received?

Show your working out and write your answer in the box below.   **(2 marks)**

15 25·80 – 375·20   £1150·60

Answer_____£1150·60_____

PassFunctionalSkills.co.uk

Question 15

Rob is looking at sale numbers for his new brand of ladies' shoes in the last year. He records the information in a table.

Shoe Size	Number of Orders
4	63
5	82
6	135
7	114
8	92
9	159

Use the space on the next page to draw a suitable chart showing Rob's findings.

(4 marks)

PassFunctionalSkills.co.uk

PassFunctionalSkills.co.uk
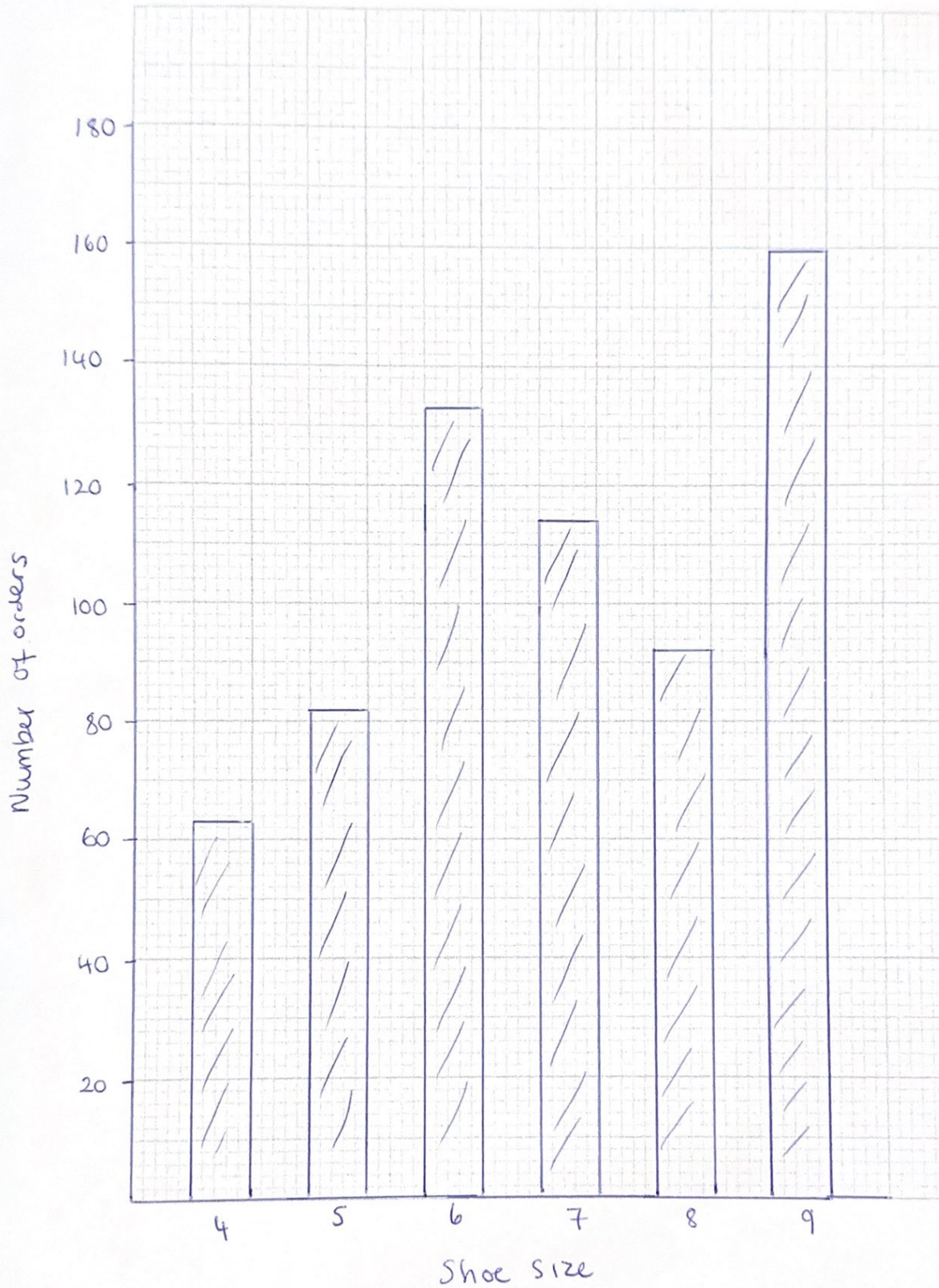
Question 16

A student rail card gives 15% off the original price.

Sue uses her rail card to buy a ticket home; the original price is £120.

How much will Sue pay for her train ticket using her rail card?

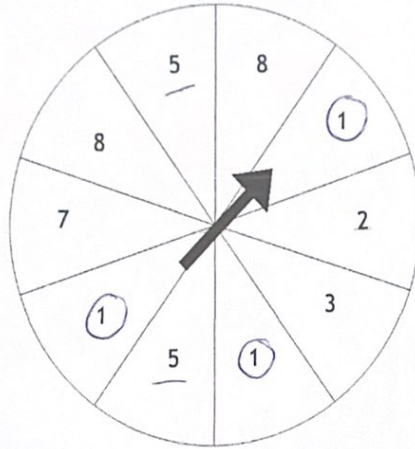Show your working out and write your answer in the box below.   **(2 marks)**

120 X 0.85 = 102

Answer ___£102___

Question 17

At a party the children are playing a board-game, they have to spin the arrow to know how many spaces to move.

a) What is the probability that the arrow will land on the number 5? Show your answer as a fraction in its simplest form.

Show your working out and write your answer in the box below. (2 marks)

$$\frac{2}{10} = \frac{1}{5}$$

$$\frac{1}{5}$$

Answer_____

b) Which number has the highest probability that the arrow will land on it in the board game? Explain your answer. (2 marks)
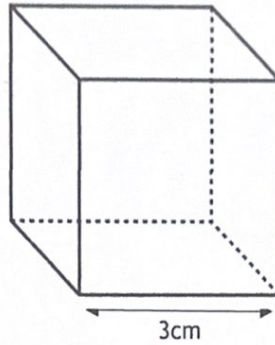
Answer_____Number 1 as it appears the most_____
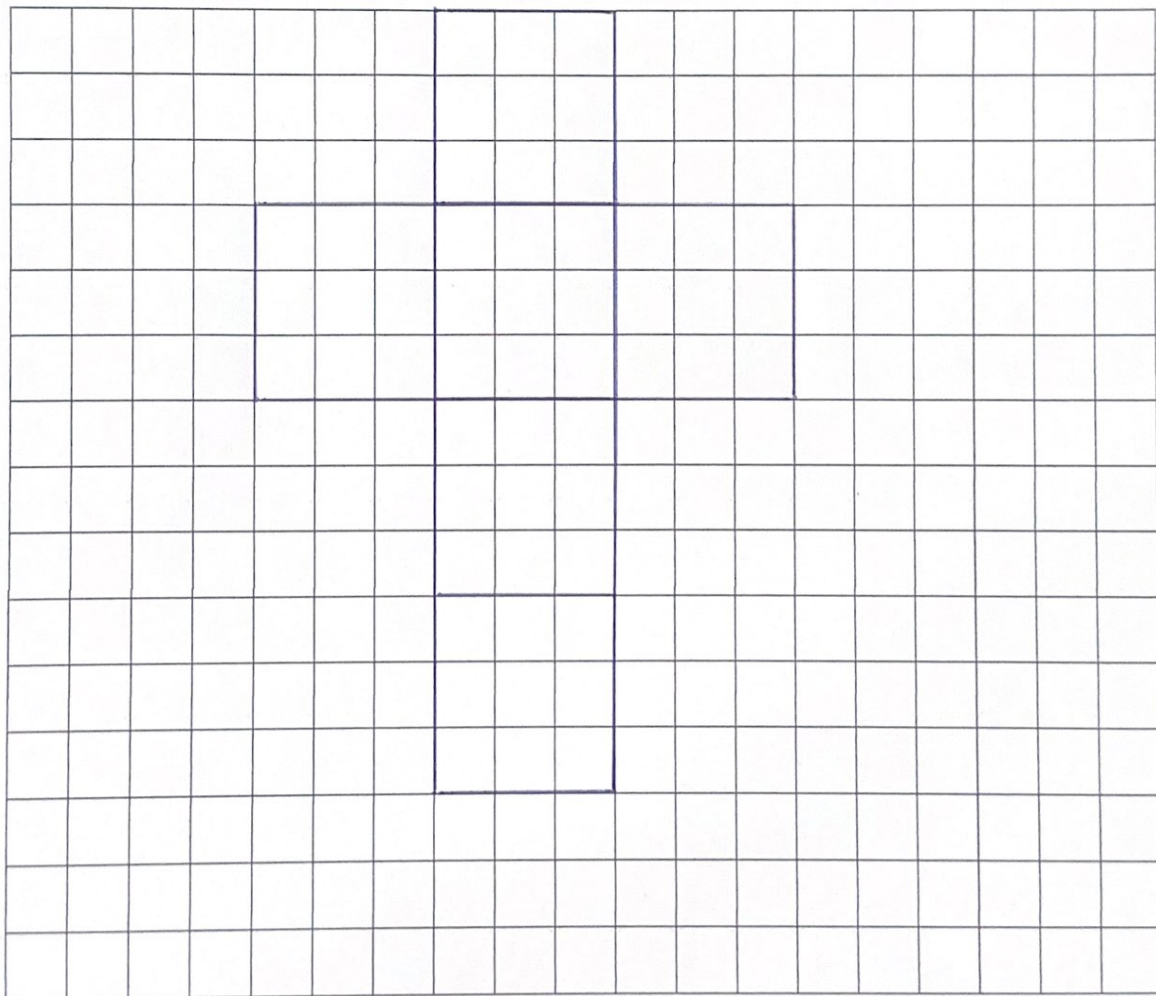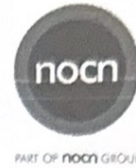
Question 18

Draw a net of the cube below.

3cm

Use this space for your drawing.

(2 marks)

PassFunctionalSkills.co.uk

Question 19

$29(42 \div 3) + 16 =$

Show your working out and write your answer in the box below.   (1 mark)
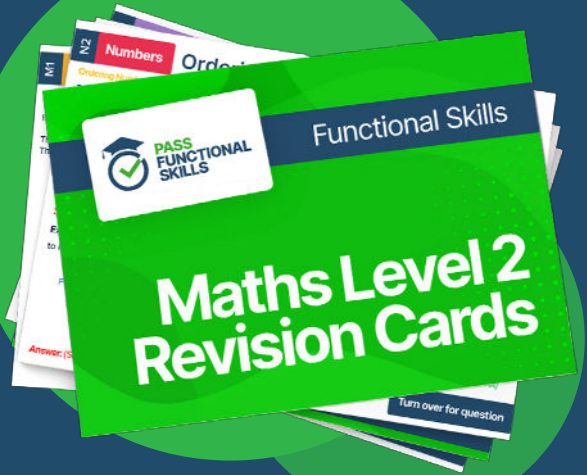
$29 \times 14 + 16 = 406 + 16 = 422$

Answer ___422___

PASS FUNCTIONAL SKILLS

**Functional Skills Maths
Level 2 Practice Papers**

**Functional Skills Maths
Level 2 Revision Cards**

**Functional Skills English Level 2
Practice Papers & Revision Cards**

**Functional Skills Maths
Level 2 Pocket Revision Guide**

Or visit
passfunctionalskills.co.uk