



Target Booklet A

Functional Skills Level 1

QUESTIONS TO PRACTICE YOUR
TARGETS

Name:

Tutor:

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All exam questions taken from Pearson Edexcel past and practice papers.



Place value



1) Write down the value of the 3 in the number 13629

(1)

2) Write down the value of 8 in the number 328407

(1)

3) Write down the place value of 8 in the number 447,890

(1)

4) There are 59,182 fans at a football match.

Write down the place value of the 9 in the number above.

(1)

5) Here are four digits.

6 3 8 9

a) Use two of these digits to make the largest possible two-digit number.

(1)

b) Use all four of these digits to make the four-digit number closest to 5000.

(1)

6) Write the number 3572 in words

(1)



7) Write the number thirteen thousand eight hundred and thirty four in figures

(1)

8) Arrange these numbers in order of size, starting with the smallest

(2)

Two billion

1.5 million

Eleven hundred and two thousand

Two hundred and seven thousand

Two million

9) Write down the value of the 9 in the number 2 983 154

(1)

10) Write the place value of 1 in the number 1906

(1)

11) Write the number fifteen thousand and sixty two in figures

(1)

Four rules



1) Work out the following:

Show all your working

a) $2457 + 4721$

b) $8067 + 4563$

c) $568 + 4758$

d) $4765 + 8965$

e) $7002 - 5698$

f) $3805 - 768$

g) $500 - 179$

h) $900 - 111$

2) Work out the remainder for each of the following divisions.

Show all your working

a) $4567 \div 7$

b) $5675 \div 3$

c) $8674 \div 6$

d) $8465 \div 8$

e) $45000 \div 12$

f) $3022 \div 15$

g) $3674 \div 16$

h) $6737 \div 11$

3) Complete the sums below:



Show all your working

(a) 64×25

b) 92×61

c) 44×64

d) 78×38

e) 457×48

f) 598×25

g) 812×45

h) 145×98

4) Work out $4500 \div 1000$

(1)

5) Work out $2350 \div 100$

(1)

6) Work out 45.67×100

(1)

7) Work out $3475 \div 1000$

(1)

8) Work out 4.455×1000

(1)



9) Mick is starting a course at college.

In the first week he will go to college Monday to Friday.

Mick has a total of £15 to spend on lunch this week.

He wants to spend £2.85 each day on lunch.

Can Mick afford to spend £2.85 on lunch each day in this week? (2)

Show all your working and answer in the box below

10) Donna is raising money to build a new village hall.

People can have their name printed on a brick for the hall.

Each person pays £32 for a brick with their name on it.

Donna hopes to raise £14 000 by selling bricks.

She thinks she will need to sell 520 bricks to reach her target of £14 000.

Are 520 bricks enough to reach her target? (3)

Show all your working and answer in the box below

BIDMAS



Complete the following, show all your working.

$8+32\div 2-11$ = 	$42- 20\times 2\div 5-16$ =
$15\times 2- 48\div 6+38$ = 	$4+56\div 8-16$ =
$7+11-8\times 3$ = 	$4-18\times 2\div 3+2$ =
$24\div 2\times 6+8-32$ = 	$42\div 7\times 4+16$ =
4 $+8\times 8$ = 	$5+36\div 4\times 5-6$ =
$4(5\times 5)$ = 	$11^2-5\times 8$ =
$2+6^2\times 2$ = 	$4(60-7^2)$ =
$7(2+3)^2$ = 	$(8-4)\times 8^2$ =
$246-2(6^2+2)$ = 	$7\times 9-9^2\times 2$ =



Negative numbers

1) Complete the following

$-2 + 8 =$	$12 + -6 =$	$-3 + 14 =$
$6 + -4 =$	$6 + 17 =$	$-4 + -8 =$
$-7 + 7 =$	$-6 + 8 =$	$-5 + 4 =$
$-7 - 5 =$	$-11 + 6 =$	$17 + -9 =$
$-6 + -10 =$	$14 + -2 =$	$16 + -5 =$
$-4 + 8 =$	$-18 + -9 =$	$-8 + 8 =$
$-4 - 6 =$	$-5 - -15 =$	$-21 - 9 =$
$-7 + 6 =$	$-21 - -9 =$	$13 + -7 =$
$-8 + -1 =$	$-5 - -7 =$	$-5 + -17 =$
$-6 - -7 =$	$-15 + -9 =$	$-3 + -7 =$

2) Complete the following

$-4 \times 6 =$	$44 \div -4 =$	$-11 \div 1 =$
$4 \times -2 =$	$-4 \times -7 =$	$-3 \times -7 =$
$-7 \times 1 =$	$-12 \times 2 =$	$-18 \div -3 =$
$-9 \times -5 =$	$-5 \times 9 =$	$18 \times -9 =$
$-63 \div -9 =$	$40 \div -2 =$	$4 \times -8 =$
$-12 \times 7 =$	$-7 \times -8 =$	$-7^2 =$
$-2 \times 12 =$	$-7 \times -5 =$	$-3^3 =$
$-8 \times 5 =$	$-88 \div -8 =$	$4 \times -12 =$
$-4 \times -8 =$	$-12 \div -4 =$	$-63 \div -7 =$
$-72 \div -8 =$	$-9 \times -8 =$	$-8 \times 6 =$



1) Chaz had £23 in the bank. She spent £55 on shoes.

By how much is she overdrawn?

(2)

Show your working and answer in the box below

2) At 6am, the temperature in Eastbourne was -4°C . By 2pm, it had risen by 21°C .

What was the temperature in Eastbourne now?

(2)

Show your working and answer in the box below

3) How much debt would Justice be in if he spent £285 but only have £78 in the bank?

(2)

Show your working and answer in the box below

4) If it is -16°C in Canada and 44°C in Australia.

What is the difference in temperature?

(2)

Show your working and answer in the box below



5) Bindi is given £70 for her birthday. She bought a pair of shoes for £49 and a pair of jeans for £33.

How much debt is she in? (2)

Show your working and answer in the box below

6) Fatmata's house had a temperature of 11°C . She put the heating on and the temperature rose by 9°C . As she was still cold, Fatmata decided to light a fire, which increased the temperature by a further 14°C .

What was the temperature in the house now? (3)

Show your working and answer in the box below

7) Mr and Mrs Smith had £450 in their bank account. At the end of the month, they had to pay three bills. Their telephone bill was £96, their gas bill was £185 and their electricity bill was £195.

How much would Mr and Mrs Smith need to pay into their account to clear their overdraft? (3)

Show your working and answer in the box below



8) At 4pm, the temperature in Sydney, Australia was 32°C . By 2am, it had dropped by 15°C , but by 10am the following morning it had risen by 12°C .

What is the temperature in Sydney now? (3)

Show your working and answer in the box below

9) Angelo was £65 overdrawn. He had to spend £345 on his car.

What is the total of his debt now? (3)

Show your working and answer in the box below

10.) Tasha made a cup of tea with a temperature of 85°C . She left it to cool, but forgot about it for 15 minutes, which meant that its temperature dropped by 70°C . She decided to reheat her tea in the microwave, which increased its temperature by 55°C , and then she drank it.

How hot was her tea at the point of drinking? (3)

Show your working and answer in the box below

Rounding and Estimation



Round these numbers to the nearest 10	Round these numbers to the nearest 100	Round these numbers to the nearest 1000
a) 4	b) 38	c) 267
d) 37	e) 550	f) 699
g) 93	h) 679	i) 3 899
j) 56	k) 469	l) 5 468
m) 342	n) 1 835	o) 32 450

1) Round 5 671 to the nearest 10 (1)

2) Round 5 671 to the nearest 100 (1)

3) Round 5 671 to the nearest 1000 (1)

4) Write the number 2 674 to the nearest ten (1)

5) Write the number 54 911 to the nearest thousand (1)



6) Rashid works at an animal centre.

The animal centre sells tickets for 47 weeks of the year.

A student's ticket costs £11.90

The Animal centre sold 28 student tickets last week.

Rashid assumes that the same number of student tickets are sold each week.

He wants to estimate the income from the sales of student tickets for the year.

Estimate the income from the sales of student tickets for the year.

Show your working and your answer in the box below.

(3)

7) At a music festival 18 756 tickets are sold for the first day.

21 920 are sold on the second day.

Estimate the total number of tickets sold in total.

Show your working and your answer in the box below.

(3)



8) Kim takes her car to the garage.

This is a list of work she has done on her car.

- Service £112
- Tyres £345.99
- Battery £ 74.99
- MOT £ 39

Kim wants to have a rough idea how much this will cost.

Estimate the total price of work done.

Show your working and answer in the box below.

(3)

9) A wall has an area of 87m^2

A tin of paint will cover 9m^2 of wall.

Gen needs to work out how many tins of paint she will need to buy.

Use estimation to work out how many tins she needs.

(3)

Show your working and answer in the box below.



Decimals

Round these numbers to the nearest whole number

- | | | | | | |
|----------|---|----------|---|----------|---|
| a) 3.94 | → | b) 12.14 | → | c) 23.2 | → |
| d) 15.26 | → | e) 14.52 | → | f) 12.38 | → |
| g) 90.82 | → | h) 24.59 | → | i) 63.08 | → |
| j) 29.51 | → | k) 38.74 | → | l) 118.4 | → |

Round these numbers to 1 decimal place

- | | | | | | |
|----------|---|-----------|---|-----------|---|
| a) 4.83 | → | b) 1.94 | → | c) 15.28 | → |
| d) 19.31 | → | e) 3.97 | → | f) 0.74 | → |
| g) 7.016 | → | h) 19.372 | → | i) 90.024 | → |
| j) 83.23 | → | k) 9.567 | → | l) 0.417 | → |

Round these numbers to 2 decimal places

- | | | | | | |
|-----------|---|-----------|---|-----------|---|
| a) 1.174 | → | b) 5.029 | → | c) 0.017 | → |
| d) 15.264 | → | e) 3.9996 | → | f) 1.083 | → |
| g) 24.316 | → | h) 0.9017 | → | i) 2.818 | → |
| j) 4.617 | → | k) 6.301 | → | l) 0.0752 | → |
| m) 1.2837 | → | n) 8.295 | → | o) 14.004 | → |

1) Work out the following.



Show your working out

(8)

a) $68.7 + 9.61$

b) $90.7 + 44.8$

c) $9.69 + 75.8$

d) $4.02 + 0.38$

e) $3.01 + 29.8$

f) $9.05 + 7.68$

g) $90.1 + 1.09$

h) $700 + 1.71$

2) Work out the following.

Show your working out

(8)

a) $68.7 - 5.61$

b) $90.7 - 44.8$

c) $9.69 - 7.58$

d) $40.2 - 1.38$

e) $31.1 - 29.8$

f) $90.5 - 7.68$

g) $90.1 - 10.9$

h) $7 - 1.71$

3) Work out the following.



Show your working out

(8)

b) 68.7×9

b) 9.7×4.8

c) 9.6×5.8

d) 4.02×0.38

e) 3.01×9.8

f) 9.05×7.6

g) 90.1×1.9

h) 700×1.71

4) Work out the following.

Show your working out

a) $326 \div 6$

b) $776 \div 5$

c) $356 \div 8$

d) $23.2 \div 8$

e) $4.02 \div 5$

f) $45.2 \div 9$

g) $377 \div 1.2$

h) $283 \div 1.1$



5) Michael wants to buy a new car.

He needs to pay

- A cash deposit of £5875
- £229.20 each month for 24 months.

(a) **Work out the total amount Michael will pay.**

(3)

Show your working and answer in the box below.



6) Lisa wants to make her home safer.

She finds a first aid kit for £19.99

Lisa thinks it may be cheaper to make a kit up herself.

She finds these prices of items to go in a kit.

Kit Items	
Plastic box	£6.94
Plasters	£2.89
Bandages	£8.95
Gloves	99p
Wipes	85p

a) How much money will Lisa save if she makes the first aid kit?

Use the space below to show clearly how you get your answer. (3)



7) Four apprentices want to raise £300 for charity.

Three of the apprentices raise these amounts.

Name	Amount raised
Harry	£65.60
Leanne	£92.70
Sanjay	£29.50

Sean is going to run around the playing field.

He is going to get £5.90 for each lap.

Sean thinks he needs to run 8 laps to raise the rest of the money.

Is Sean correct?

Show why you think this.

Use the space below to show clearly how you get your answer. (4)



Formula and Function machines

1) Magda works at a charity for homeless people.

She needs to make lunch for 20 people.

Magda knows this rule to find the amount of rice she needs to cook.



Magda thinks she needs to cook 10 cups of rice for 20 people.

Is Magda correct?

Show your working and answer in the box below.

(3)



2) Donna and her friend Martin are training for a sponsored run.
The sponsored run is 26 miles.
They find this rule to calculate how many calories are used to run 1 mile.



Donna weighs 128 pounds.
Martin weighs 148 pounds.
Martin thinks he will use 300 more calories on the sponsored run than Donna.

Is Martin correct?

Show your working and answer in the box below.

(5)

3) Michael plays football.



Michael wants to know how fit he is.

He measures his heart rate in beats per minute (bpm).

Michael uses this formula to work out his fitness value.

$$F = \frac{m \times 15}{r}$$

F = fitness value

m = maximum heart rate

r = resting heart rate

Michael has a

- Maximum heart rate of 188 bpm
- Resting heart rate of 62 bpm

A footballer should have a fitness value greater than 54.

Does Michael have a fitness value greater than 54?

(3)

Show your working and answer in the box below.

Fractions



1) Simplify the following

a) $\frac{12}{36}$

e) $\frac{16}{32}$

i) $\frac{8}{16}$

b) $\frac{70}{100}$

f) $\frac{72}{81}$

j) $\frac{35}{56}$

c) $\frac{21}{28}$

g) $\frac{7}{14}$

k) $\frac{14}{21}$

d) $\frac{8}{12}$

h) $\frac{9}{45}$

l) $\frac{10}{15}$

2) Put the following in order from smallest to largest

a) $\frac{11}{36}$ $\frac{14}{18}$ $\frac{8}{9}$

b) $\frac{59}{100}$ $\frac{17}{20}$ $\frac{7}{10}$

c) $\frac{23}{28}$ $\frac{9}{14}$ $\frac{5}{7}$

d) $\frac{8}{12}$ $\frac{5}{6}$ $\frac{3}{4}$



3) Marta manages the rentals of beach huts.
There are 96 beach huts.

24 of these beach huts are available to rent.

Marta thinks that $\frac{1}{4}$ of the beach huts are available to rent

Is Marta correct?

Show why you think this.

Use the box to show clearly how you get your answer.

(2)



4) The table shows the amount of money collected by each team of the rowing event.

Team	Amount collected
A	£2347
B	£3862
C	£3581
D	£1954

Luke was in team A.

He says 'Team A collected $\frac{1}{5}$ of the total amount.'

Is $\frac{1}{5}$ of the total amount of money collected £2347?

Use the box below to show clearly how you get your answer.

(3)



5) Last year, the company had 18 000 bookings in total.

5400 of these bookings were for boat trips.

Olga says ' $\frac{1}{3}$ of all our bookings last year were for boat trips.'

Is Olga correct?

Show why you think this.

Use the box to show clearly how you get your answer.

(3)

Percent



Find 10% of the following amounts

a) £56	b) £80
c) £200	d) £300
e) £57.50	f) £67.50
g) £1.50	h) £750
i) £780	j) 17.5
k) £66	l) 2.5
m) £35	n) 300
o) £456	p) 450

Increase the following by 15%

a) £500
b) £200
c) £60
d) £150
e) £780
f) £660
g) £350
h) £450

decrease the following by 5%

a) £500
b) £200
c) £60
d) £150
e) £780
f) £660
g) £350
h) £450



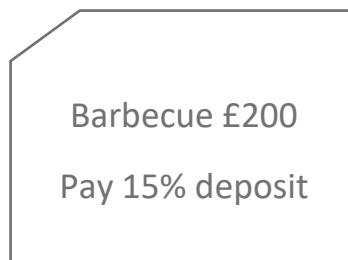
1) Six students complete an assessment. To pass the assessment the students need to get at least 75% of the total marks. The total mark is 145. John scored 102 marks.

Has John passed the assessment?

(2)

Show your working and answer in the box below.

2) Jane wants to buy a barbecue. She sees this offer:



Work out 15% of £200 for Jane.

(2)

Show your working and answer in the box below.



3) There are 6000 bees in the beehive. 15% of the bees in the beehive are male bees.
Alia thinks there are 900 male bees in the beehive.

Is Alia correct?

(2)

Show your working and answer in the box below.

4) Freya is the production manager.

There are 150 staff making food at polar frozen foods.

Each of them works 37 hours a week.

Freya is going to raise the hourly rate of these staff from £8.20 per hour to £9.25 per hour.

She also wants to increase the number of staff making food by 10%

They will be paid £9.25 per hour and will also work 37 hours a week.

Calculate the increase in the total amount of money the company will have to pay the staff making food each work.

(4)

Show your working and answer in the box below.

Simple Interest



1) You deposit £500 into a bank account paying 5% simple interest per year.

How much interest would you have earned after 8 years?

(2)

Show your working and answer in the box below.

2) Jay is paid £1500 each month.

He saves 15% of the £1500 each month.

How many months will it take Jake to save £580?

Show your working and answer in the box below.

(3)



3) Here is information about two investments

Investment A Invest £3600 for 5 years and get £9 each month

Investment B Invest £3600 for 5 years at a rate of 4.5% per year simple interest.

Which is the better investment?

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

4) Meg has £1600 in her savings account.

The account pays 5% simple interest per year.

How much interest will she earn in 8 years? (2)

Show your working and answer in the box below.

Ratio



1) The cost of 15 litres of petrol is £12

Work out the cost of 20 litres of petrol.

(2)

Show your working and answer in the box below.

2) Jenny buys 4 folders.

The total cost of these 4 folders is £6.40

Work out the total cost of 7 of these folders.

(2)

Show your working and answer in the box below.

3) Theresa bought 5 theatre tickets for £60

Work out the cost of 9 theatre tickets.

(2)

Show your working and answer in the box below.

4) The workers in a company are in a ratio of female: male = 2:5

i) What is the ratio of female to all the workers?

(2)

Show your working and answer in the box below.

ii) The company has 150 female workers.

How many workers are there altogether?

(2)

Show your working and answer in the box below.



5) £50 is shared in the ratio 2:3

How much does each person get?

(2)

Show your working and answer in the box below.



6) £56 is shared in the ratio 1:2:4

How much does each person get?

(2)

Show your working and answer in the box below.

7) A mixture of paint is used for Tim's flat. To get the colour correct he needs to mix Blue and Yellow paint in the ratio 1 Blue to 4 Yellow.

	Blue Paint 1 Tin = 5 Litres £12.00		Yellow Paint 1 Tin = 7 Litres £14.00
---	---	--	---

Shown are the tins of paint Tim can buy.

Tim works out he will need 26L of the blue/yellow mixture to cover all the walls.

Work out the total cost of Tim's painting job, show all your working out. (3)

Conversion



Convert the following

a) 6cm to mm	b) 93g to kg
c) 5m to cm	d) 2.5kg to g
e) 3.6km to m	f) 6 L to ml
g) 2.7cm to mm	h) 450ml to L
i) 550m to km	j) 6.5L to ml
k) 2km to m	l) 3.5 hrs to mins
m) 6kg to g	n) 4 $\frac{1}{4}$ hrs to mins
o) 768p to £	p) 1.5 hrs to seconds

1) Leanne needs bottles of water for the people at the training day.

Each bottle contains 2 litres of water. There will be 18 people. Every person will have 4 glasses of water. Each full glass holds 300ml of water.

Leanne thinks she will need 7 bottles of water.

Are 7 bottles of water enough for 18 people?

Use the box below to show clearly how you get your answer.

(5)



- 2) Clive plans to walk with a friend along the Cliffs of Moher.
Clive wants to carry a total of at least 5 litres of liquid to drink on the walk.

He has

- 3 large bottles of water (750ml each)
- 3 small bottles of water (500ml each)
- 4 cans of soft drink (330ml each)

- a) Does Clive have at least 5 litres of liquid?

Use the box below to show clearly how you get your answer.

(4)



1) Kay is organising an exhibition on health and beauty.

The exhibition will be open from 10 am to 5pm.

There will be

- 4 different exhibition rooms with presentations
- a lunch break for 30 minutes.
- 2 coffee breaks for 20 minutes each

Lunch and coffee will be served in the restaurant.

Kay wants people to spend an equal amount of time in each exhibition room. She thinks this means people will spend at least 1 hour 20 minutes in each exhibition room.

Is Kay correct?

(4)

Show why you think this.

Use the space below to show clearly how you get your answer.

Shapes



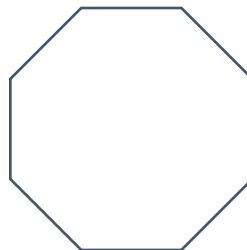
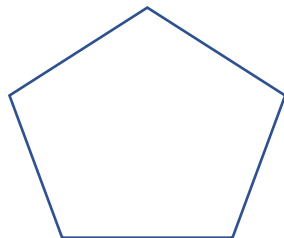
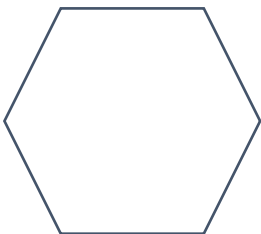
1) Name the shapes below

(4)



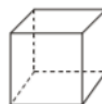
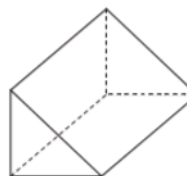
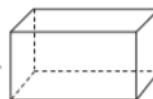
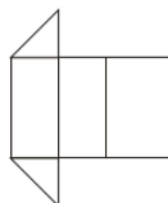
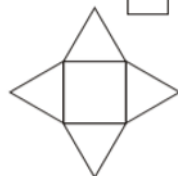
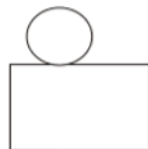
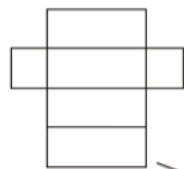
2) Draw in the lines of symmetry for the regular shapes below.

(3)



3) Draw a line from the nets of the shapes to their matching 3D solids.

(4)





4) Complete the table below.

(4)

3D shape	Faces	edges	Vertices
Cuboid			
	1	0	0
Square based triangle			
	5	9	6

5) Anna needs to work out where to put the toilet and the basin in her bathroom.

The toilet must be in a corner of the room and not in front of a window.

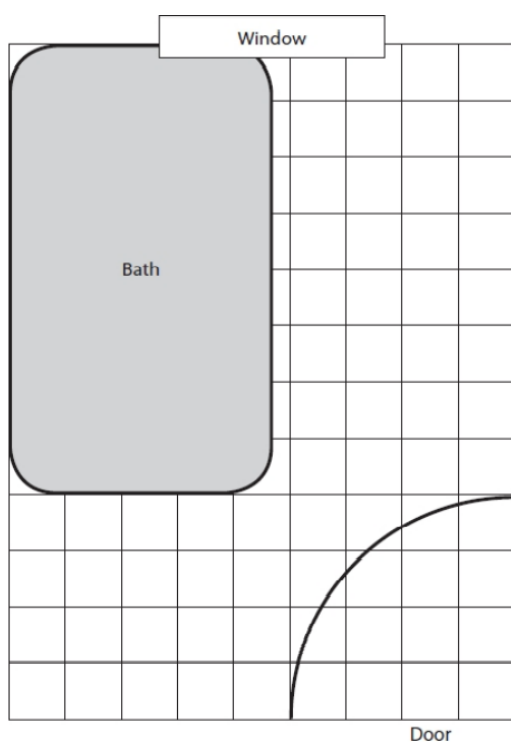
It needs a rectangular floor space 50 cm by 125 cm.

The basin must be against a wall. It needs a space 75 cm square.

Anna draws a plan of the bathroom on a grid.

Draw and label the space for the toilet and the space for the basin on the grid. (4)

Remember to use the key.



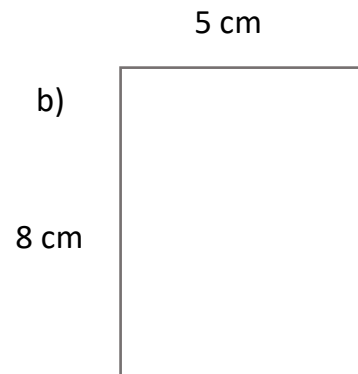
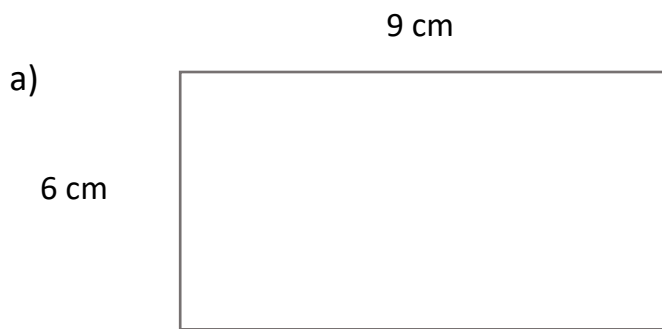
Key: 1 square on the grid is 25cm by 25cm in the bathroom.

Area and perimeter



1) Find the area and perimeter of the two shapes below

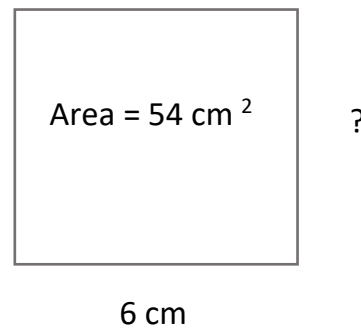
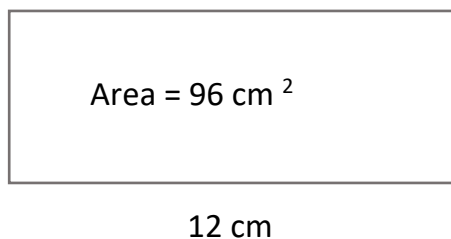
(4)



Use the space below to show clearly how you get your answer.

2) Find the missing sides on the two shapes below.

(2)

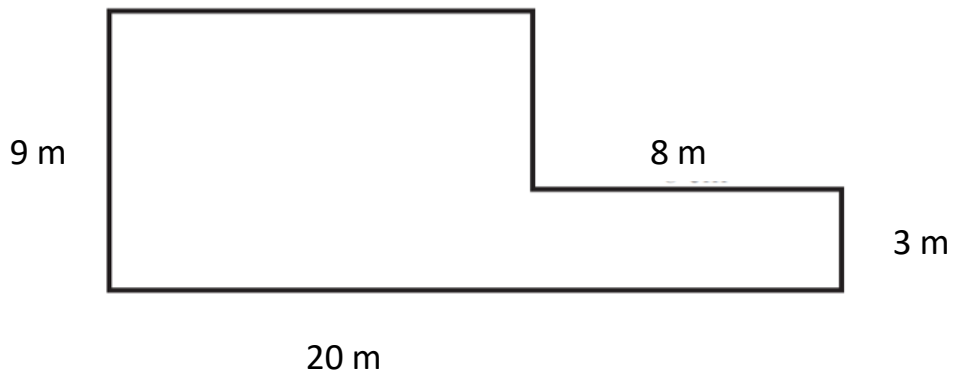


Use the space below to show clearly how you get your answer.



3) Find the area and perimeter of the shape below.

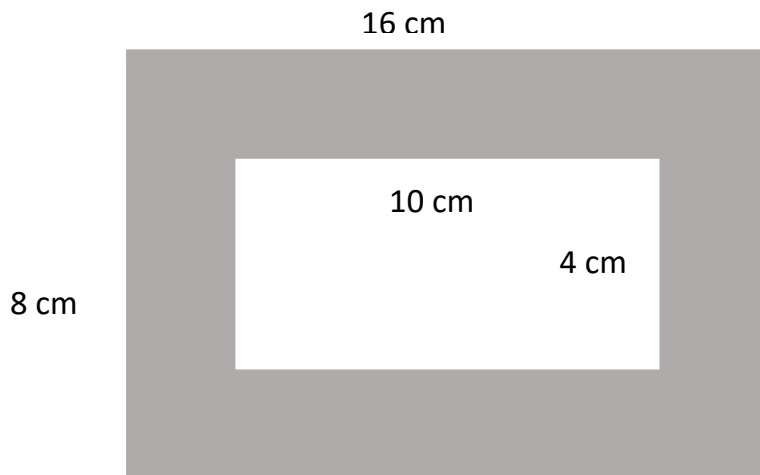
(4)



Use the space below to show clearly how you get your answer.

4) Find the shaded area of the shape below

(3)

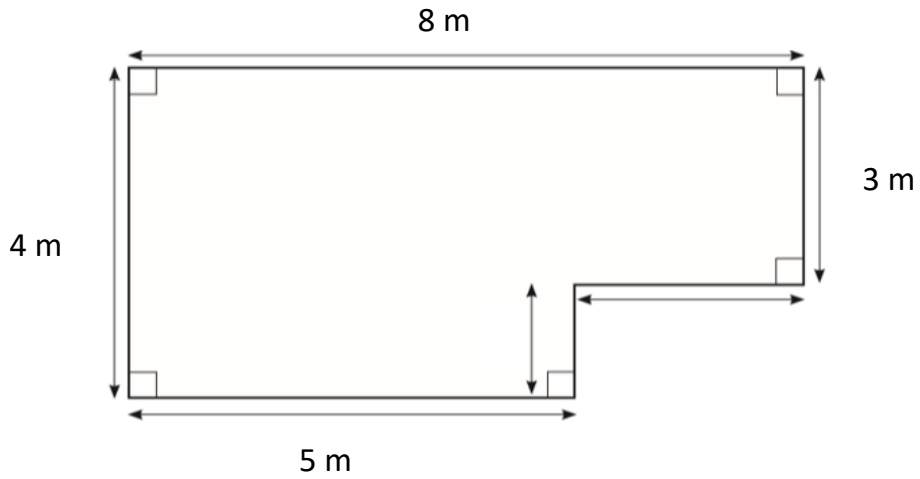


Use the space below to show clearly how you get your answer.



5) From Tuesday to Saturday Kirsty works in her salon.
She needs to decorate her salon.

Kirsty wants to lay a new floor.
The diagram shows the floor space of the salon.



Work out the area of the floor space of the salon. (4)

Use the space below to show clearly how you get your answer.

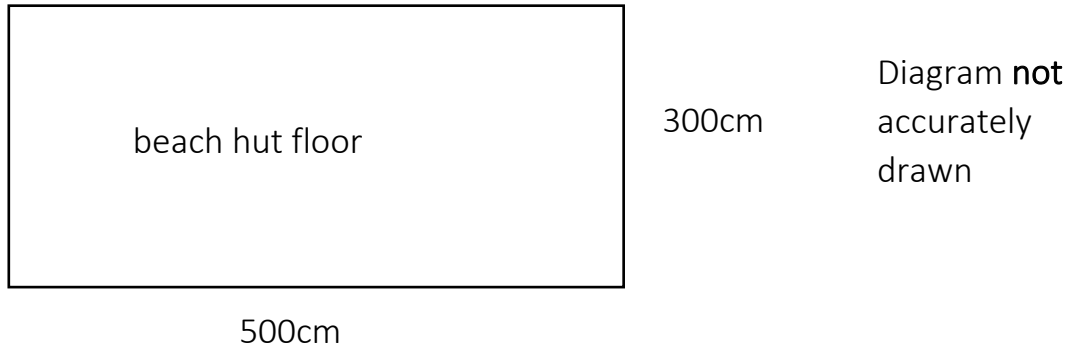
Large empty rounded rectangular box for showing the solution.



6) Marta needs to cover the whole floor in 4 of the beach huts with tiles.

The floor in each beach hut is rectangular 500cm by 300cm.

Each tile is square 50cm by 50cm.



Each tile costs £9.99

Marta has £900 to spend on the tiles.

Is £900 enough to buy all the tiles Marta needs? (6)

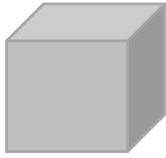
Use the space below to show clearly how you get your answer.

Volume

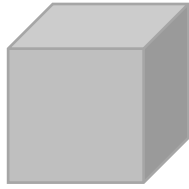


1) Find the volume of the cubes below.

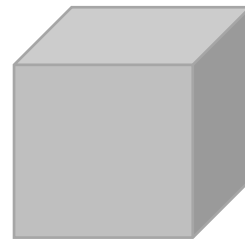
(3)



a) 5cm



b) 8cm

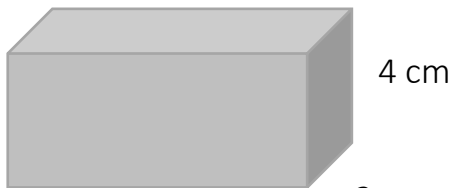


c) 12 cm

Use the space below to show clearly how you get your answer.

2) Find the volume of the cuboids below.

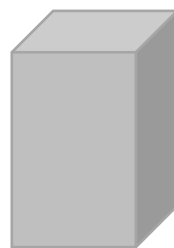
(2)



a) 10 cm

2 cm

4 cm



b) 5 cm

5 cm

8 cm

Use the space below to show clearly how you get your answer.



3) Rosa makes candles to sell. Each candle of a cuboid has a height of 10 cm
The sides of each candle is 4 cm.

Rosa needs to know the volume of one candle.

Work out the volume of one candle. (3)

Remember to give units with your answer.

Use the space below to show clearly how you get your answer.

4) Josh is constructing a stage at a music concert.

The stage is in the shape of a cuboid. It is 3m high.



The stage is 11 m long and 5 m wide

What is the volume of stage? (3)

Remember to give the units with your answer

Use the space below to show clearly how you get your answer.



Charts and Graphs

1) Teddy works at a cinema.

He sells frozen drinks in 4 different flavours.

Teddy wants to compare the number of sales of each flavour.

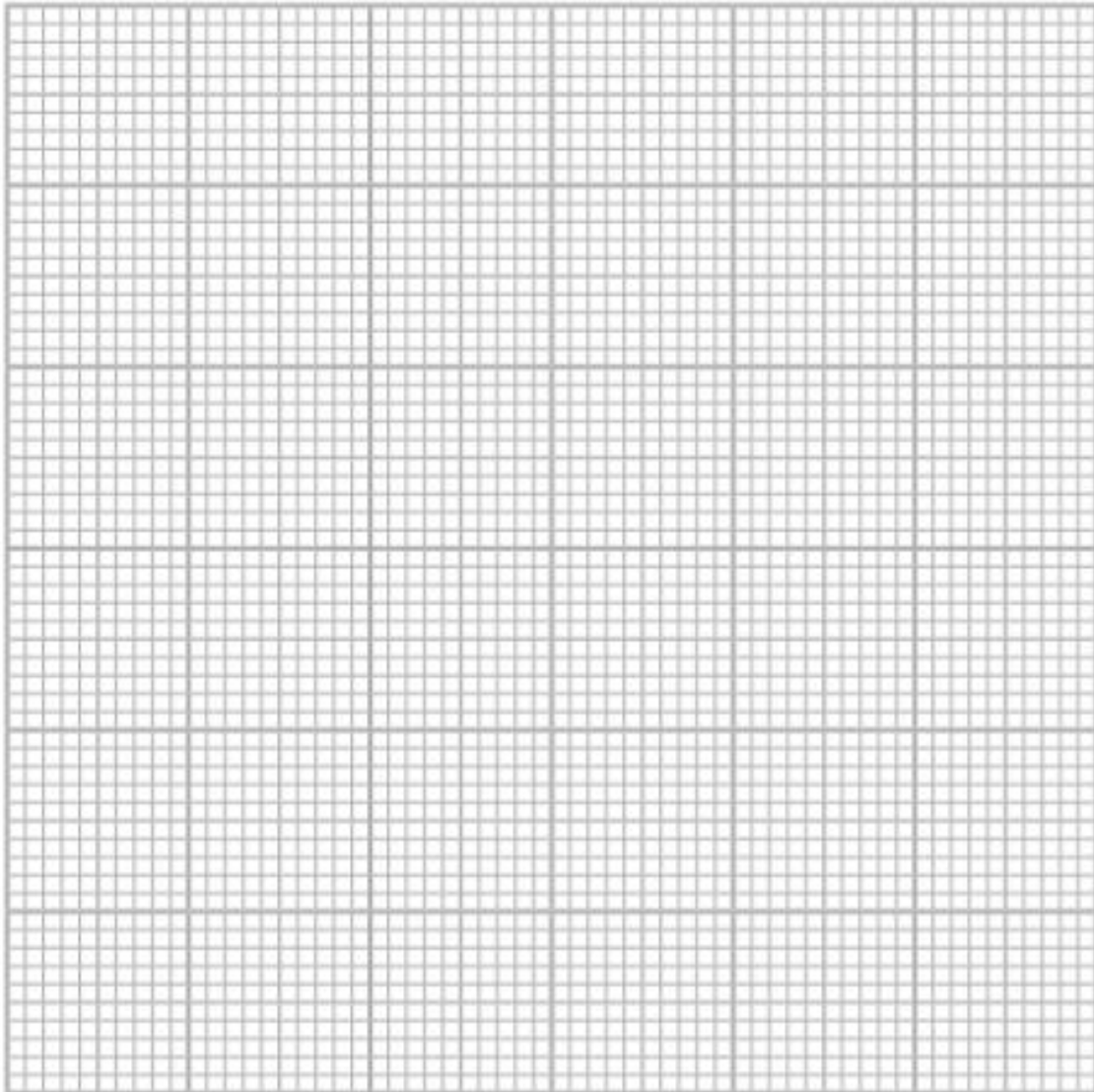
He has this information about the sales last week.

Flavour	Raspberry	Cherry	Lemon	Orange
Number of sales	150	200	100	50

Draw a bar chart to compare the number of sales of each flavour last week.

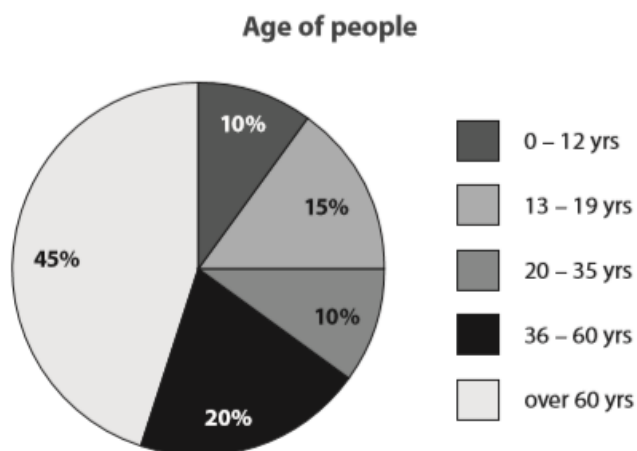
Use the graph paper below to draw your graph or chart.

(3)





2) Carry has this information about the age of people who use eye care centre.



Carrie says the pie chart shows that a quarter of the people using the eye care centre were between 36 to 60 years old.

(a) Is Carrie correct?

Use the box below to show your answer (2)

(b) 28 people surveyed were between 20 to 35.
How many people were surveyed in total? (2)
Use the box below to show your answer



3) The tour company offers different tours.

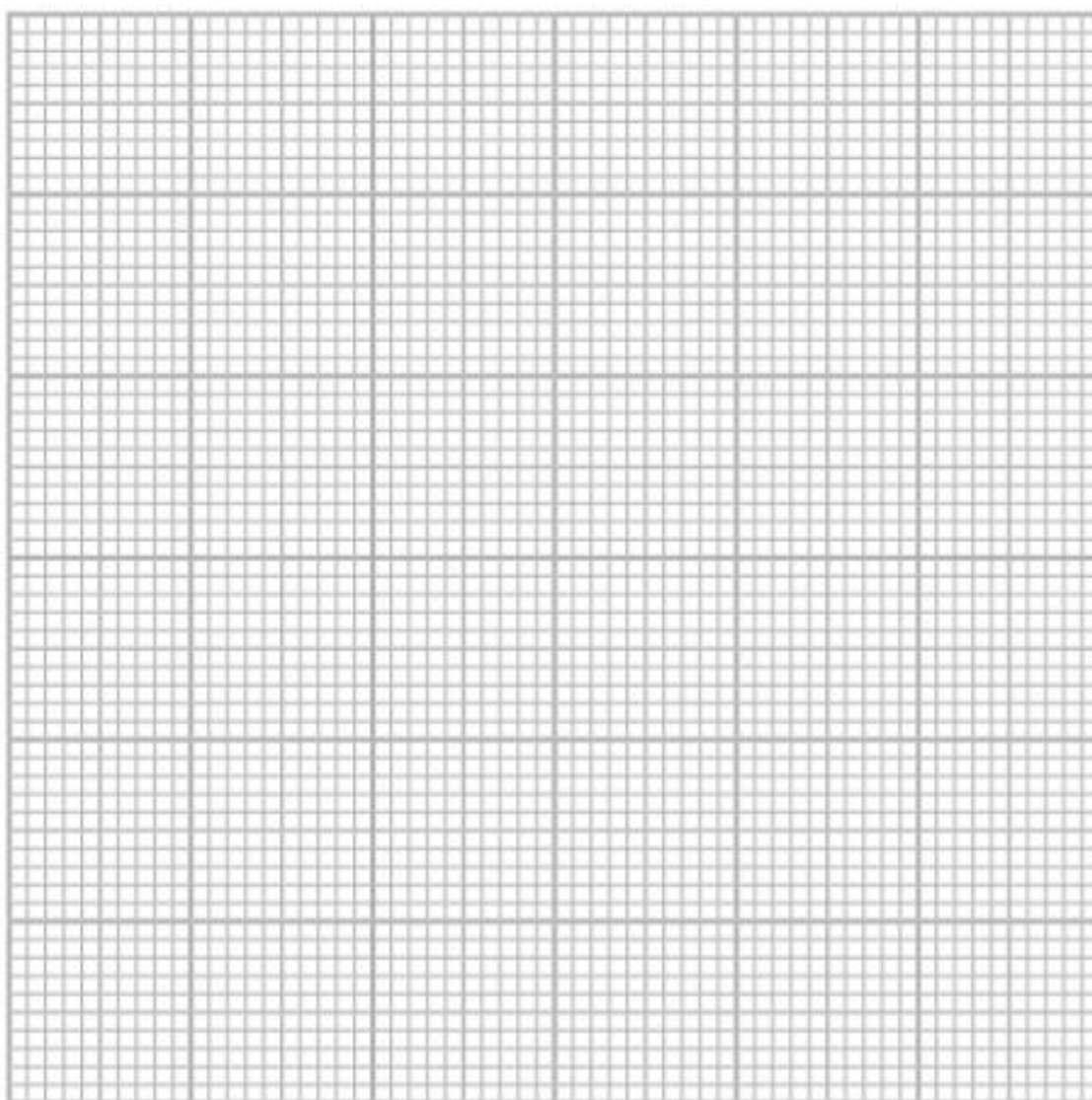
Olga has this information about the number of people who booked on each tour last year.

Olga wants to show this information in a graph or chart

Tour	Walking	Day boat trip	Evening boat trip	Cable car	Lake
Number of people	6000	4000	1500	2500	2600

Draw a suitable graph or chart for Olga

(3)





4) Paulo manages the ticket sales for Lowton United.

He is writing a report about ticket sales.

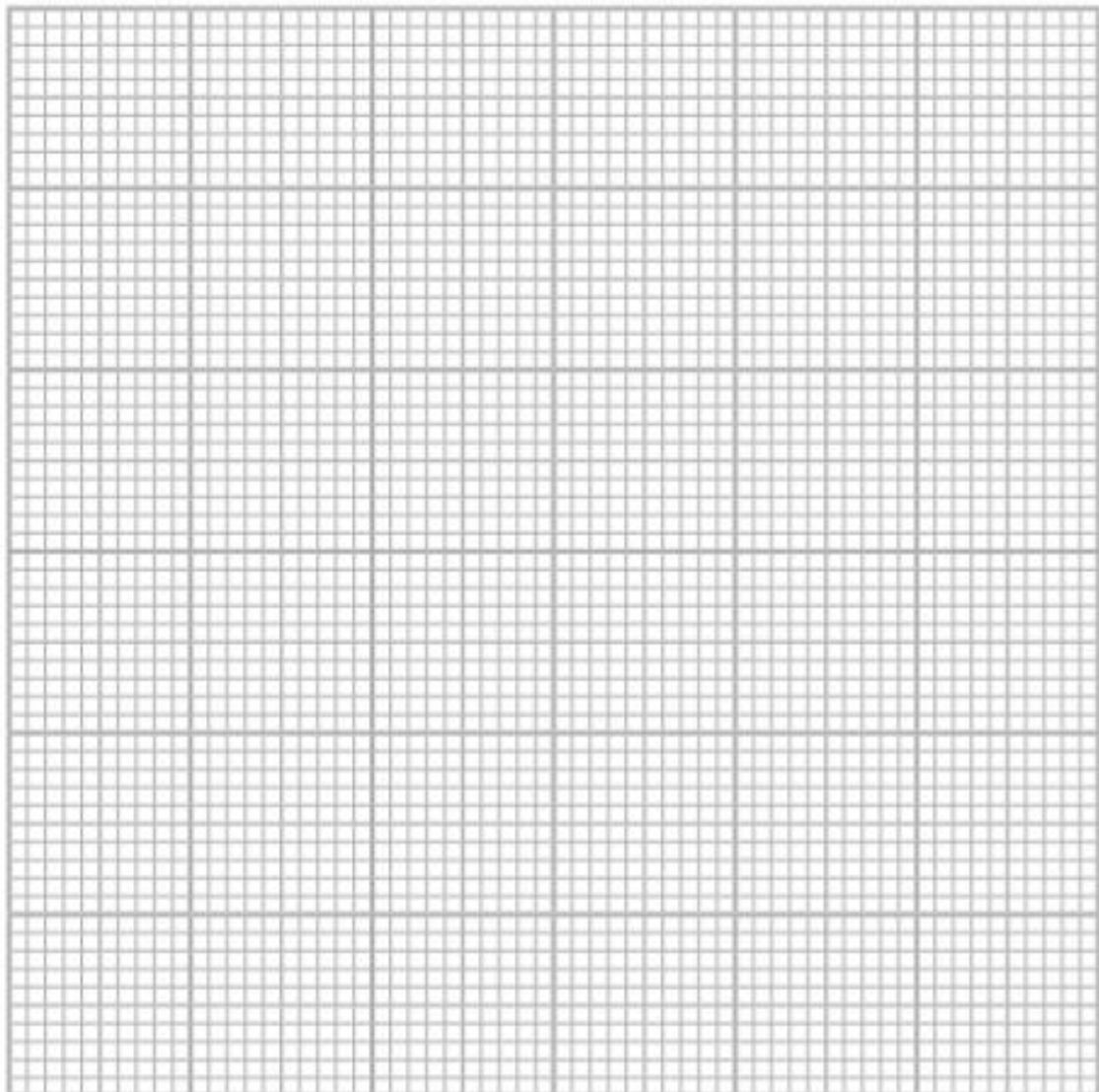
He wants to draw a graph to show the ticket sales for the last 6 matches.

Ticket sales

Match 1	Match 2	Match 3	Match 4	Match 5	Match 6
3200	2600	4500	1600	5000	4500

Draw a line graph to show this information.

(3)



Mean and Range



1) A café is open 6 days a week.

The manager says he needs to serve a mean number of 55 people a day to make a profit.

The table shows the number of people served in the café each day for one week.

	Mon	Tue	Wed	Thur	Fri	Sat
Number of People	22	65	18	45	70	135

Jo says the mean number of people served a day is more than 55.

Is Jo correct?

Show why you think this.

Use the space below to show clearly how you got your answer. (3)



2) Luke is a member of a rowing club.

The rowing club organises a charity event using indoor rowing machines.

The table shows the time it took Luke to row 10 km in 6 training sessions.

Time taken (minutes)	56	45	49	55	47	52
----------------------	----	----	----	----	----	----

Luke can enter the rowing event if his mean time to row 10 km is less than 50 minutes.

Is his mean time to row 10 km less than 50 minutes? (3)

Use the space below to show clearly how you got your answer.

3) The amount of water in some containers is:

2 litres, 330ml, 0.08 litres, 0.7litres, 75ml, 5000ml, 0.15 litres

Find the range. (2)

Use the space below to show clearly how you got your answer.



- 4) Brian has this information about the number of tickets sold for the last 5 matches.

Match	1	2	3	4	5
Tickets sold	205	106	258	127	120

Brian says...

The average number of tickets sold for the last 5 matches is 150

Is Brian correct?

Show why you think this.

(3)

Use the space below to show clearly how you get your answer.

- 5) Alia wants to know the range of the weight of honey in the 5 jars.

Jar	1	2	3	4	5
Weight of honey (g)	330	420	450	455	465

Work out the range of the weight of the honey in the 5 jars.

(2)

Use the space below to show clearly how you got your answer.



Probability

1) Lowton United is taking part in a cup competition.

There are 10 teams including Lowton United in the competition.

To decide who will play who in the next round, the team names are chosen at random from a bag.

One team is chosen at a time.

What is the likelihood that Lowton United is chosen from the bag first? (1)

Tick a box to show your answer.

Impossible

Unlikely

Even chance

Likely

Certain

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

2) Jean has baked 40 cupcakes.

15 cupcakes are lemon, 15 cupcakes are chocolate and 10 are plain.

Jean picks up a cupcake at random to decorate it with butter cream.

What is the likelihood of the cupcake being lemon? (2)

Use the space below to show clearly how you got your answer.



3) There is a lucky dip for a children at the café on Monday.
Each child who has a go on the lucky dip wins a prize.

There are a total of 50 prizes.

The prizes are:

- 10 red lollipops
- 15 green lollipops
- 5 yellow lollipops
- 20 blue lollipops

Bradley is the first child to have a go on the lucky dip.

What is the likelihood that Bradley wins a blue lollipop?

(2)

Tick a box to show your answer.

Impossible

Unlikely

Even chance

Likely

Certain

<input type="checkbox"/>
<input type="checkbox"/>
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<input type="checkbox"/>
<input type="checkbox"/>

4) Anne makes 60 party invitations out of coloured paper.

30 of the invitations are red, 12 are blue and the rest are green.

She picks one up at random and post it.

What is the probability that Anne posted a green invitation?

(3)

Checks



1) Atif has received a text from his bank showing the following debits

- Restaurant £78
- Football tickets £167

His balance before the debits was £841 Atif wants to pay for a holiday that costs £528.

a. **Does Atif have enough money to pay for the holiday?** (3)

Use the space below to show clearly how you got your answer.

b. **Use estimation to show a check of your answer.** (1)

2) Jess is an apprentice at a large organisation with 6000 employees.

15% of those employees commute over one hour to work.

Jess thinks 900 employees commute over one hour to work a.

a. **Is Jess correct?** (3)

Use the space below to show clearly how you got your answer.

b. **Use a reverse calculation to show a check of your answer.** (1)

QR codes-Video links

Addition & Subtraction



Multiply & Divide



Rounding



Estimating



Negative Numbers



BIDMAS



Powers & Roots



Fraction of an amount

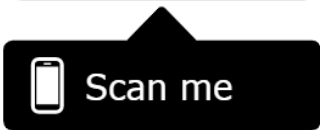


Ratio Basics



Direct Proportion

1



Direct Proportion

2



FDP Conversion



Percentage of Amount



Best Buys



Basic Area



Basic Perimeter



Angles in a Triangle



Volume



Averages



Pie Charts



Probability



Probability Tables



Averages



20
19
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17
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7
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4
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-20

Fraction wall

$\frac{1}{1}$										One Whole
$\frac{1}{2}$					$\frac{1}{2}$					Halves
$\frac{1}{3}$			$\frac{1}{3}$			$\frac{1}{3}$				Thirds
$\frac{1}{4}$		$\frac{1}{4}$		$\frac{1}{4}$		$\frac{1}{4}$				Quarters
$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$		Fifths
$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	Eighths
$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	Tenths

Numbers in words

1	One	17	Seventeen
2	Two	18	Eighteen
3	Three	19	Nineteen
4	Four	20	Twenty
5	Five	30	Thirty
6	Six	40	Forty
7	Seven	50	Fifty
8	Eight	60	Sixty
9	Nine	70	Seventy
10	Ten	80	Eighty
11	Eleven	90	Ninety
12	Twelve	100	One hundred
13	Thirteen	1 000	One thousand
14	Fourteen	10 000	Ten thousand
15	Fifteen	100 000	One hundred thousand
16	Sixteen	1 000 000	One million

Dates/Months/Years

1st	first	16th	sixteenth
2nd	second	17th	seventeenth
3rd	third	18th	eighteenth
4th	fourth	19th	nineteenth
5th	fifth	20th	twentieth
6th	sixth	21st	twenty-first
7th	seventh	22nd	twenty-second
8th	eighth	23rd	twenty-third
9th	ninth	24th	twenty-fourth
10th	tenth	25th	twenty-fifth
11th	eleven	26th	twenty-sixth
12th	twelfth	27th	twenty-seventh
13th	thirteenth	28th	twenty-eighth
14th	fourteenth	29th	twenty-ninth
15th	fifteenth	30th	thirtieth
		31st	thirty-first

Months of the year	
January	July
February	August
March	September
April	October
May	November
June	December

Decade	10 years
Century	100 years
Millennium	1 000 years

—

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Less than whole numbers	$\frac{1}{1000}$	thousandth						
	$\frac{1}{100}$	hundredth						
	$\frac{1}{10}$	tenth						
	Point	•						
Whole numbers		Units						
		Tens						
		Hundreds						
		↵						
		Thousand						
		Ten Thousand						
		Hundred thousand						
		↵						
		Million						
		Ten Million						
		Hundred Million						
		↵						
		Billion						
		Ten Billion						
		Hundred Billion						

Multiplication table

X	0	1	2	3	4	5	6	7	8	9	10	11	12
0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10	11	12
2	0	2	4	6	8	10	12	14	16	18	20	22	24
3	0	3	6	9	12	15	18	21	24	27	30	33	36
4	0	4	8	12	16	20	24	28	32	36	40	44	48
5	0	5	10	15	20	25	30	35	40	45	50	55	60
6	0	6	12	18	24	30	36	42	48	54	60	66	72
7	0	7	14	21	28	35	42	49	56	63	70	77	84
8	0	8	16	24	32	40	48	56	64	72	80	88	96
9	0	9	18	27	36	45	54	63	72	81	90	99	108
10	0	10	20	30	40	50	60	70	80	90	100	110	120
11	0	11	22	33	44	55	66	77	88	99	110	121	132
12	0	12	24	36	48	60	72	84	96	108	120	132	144