Starter slips for the start of each lesson. All questions require students to interpret and solve. Students to follow the same steps for each question.

- 1) Underline the key parts to the question.
- 2) Annotate their working out to explain their working.
- 3) Check their answer is 'reasonable'

4 On 1st June, Brian has £312 in his bank account. On 5th June he puts £120 into his bank account. On 10th June he puts £25 into his bank account.

This is how much Brian spends from his bank account from 1st June to 15th June.

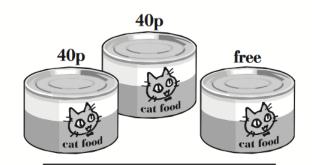
Supermarket	£42.40
Mobile phone bill	£21.05
Grocery shop	£24.30
Electricity bill	£64.20
Online book purchase	£18.32
Council tax	£144.50
Clothes	£84.20
Supermarket	£51.35

On 16th June, Brian wants to know how much money there is in his bank account.

(a) Work out how much money there is in his bank account.

13 Tins of cat food normally cost 40p each.

A shop has a special offer on the cat food.



### **Special Offer**

Pay for two tins and get one tin free!

Julie wants to buy 12 tins of cat food.

(a) Work out how much she pays.
You must show clearly how you got your answer.

(3)

14 Ian makes lampshade frames using wire. Each frame needs 240 cm of wire to make it.

Ian buys the wire in 12 metre lengths. Each 12 m length costs him £1.50

He sells the lampshade frames for 99p each.

One week he makes and sells 100 lampshade frames.

How much profit or loss did he make that week? You must show clearly how you got your answer.



(Total for Question 14 = 5 marks)

17 Bob works as a bricklayer.

On average he can lay 200 bricks in one hour.

He builds a wall that needs 960 bricks.

He starts work at 8 am and has a quarter of an hour break at 11 am.

Work out at what time Bob finished building the wall.



(Total for Question 17 = 5 marks)

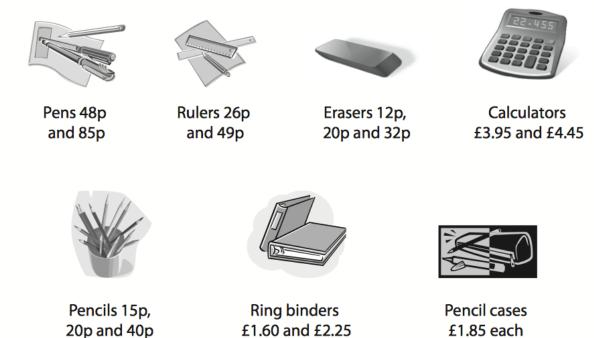
18 Packets of "Swash" detergent are sold in three sizes.

Small packets cost 99p and hold 200 g Medium packets cost £1.99 and hold 500 g Large packets cost £3.50 and hold 850 g



Which is the best buy? You must show clearly how you got your answer.

(Total for Question 18 = 3 marks)



Christine has £8 to spend on equipment before starting her new school. She needs to buy one calculator, one pencil case, one ruler, 2 pens and 2 pencils.

Where she can afford it, she buys the most expensive of each item.

What could Christine buy with her £8?

(Total for Question 4 = 5 marks)

\*5 Ali needs 165 tiles to tile a room.

Tiles are sold in boxes at £12.20 per box or a single tile can be bought for £1.40. There are 12 tiles in each box.



£1.40 for a single tile

Ali bought the tiles for her room spending the least amount of money. Show how Ali did this.

(Total for Question 5 = 5 marks)

15	Jim	buys	3	portions	of	chips
	The	total	C	net is f2	85	

Emma buys fish and 2 portions of chips. The total cost is £4.80

(a) Work out the cost of the fish.

£....(3)

14 Claire, David, Rachel and Steph are stylists in a hairdressing salon. Billy, Oliver and Vicky have general duties working in the salon.

At the end of each week, all tips that have been received are shared between the four stylists and Billy, Oliver and Vicky.

Billy, Oliver and Vicky get half the amount that each of the stylists get. Last week, a total of £308 was received in tips.



How much should Billy get?

(Total for Question 14 = 3 marks)

13 A surgery kept a record of the number of patients attending on Monday.

There were 25 adults.

There were 26 male children.

18 of the adults were men.

The total number of patients was 60

(a) Complete the two-way table.

	Male	Female	Total
Adult			
Child			
Total			

14 The time sheet shows the number of hours that Sally worked Monday to Saturday during one week.

	Mon	Tues	Wed	Thurs	Fri	Sat	Sun
Hours	4	8	4	8	4	$5\frac{1}{2}$	

Sally started work on Sunday at 08:30 and finished at 13:00

Monday to Friday, she is paid £6.92 for each hour she works.

On Saturday and Sunday, she is paid time and a half for each hour she works.

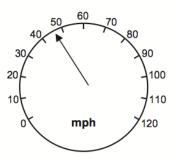
Work out the total amount of money that Sally is paid for working Monday to Sunday.

(Total for Question 14 is 6 marks)

6

Rachel drove her car past a speed camera.

The diagram shows the reading on the speedometer of her car.



The speedometer of her car always reads 3 mph more than her actual speed.

The speed limit was 40 mph.

The camera allows a vehicle to exceed the 40 mph speed limit by 2 mph. For every car that exceeds the speed limit, a fine is issued.

\*(a) Did Rachel receive a fine?

(3)

You must show clearly how you got your answer.

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2 pencils at 74p each 1 pencil case at £2.67 1 pen at £1.98

He pays with a £10 note.

Work out how much change he should get.

£	
(Total for Question	n 2 is 3 marks)

7 Bobby works at a cinema.

He works on Monday, Tuesday, Wednesday, Thursday and Friday. He gets a bonus if he sells 500 or more tickets in a week.

The table shows how many tickets he sold on each of the first four days.

Day	Number of tickets sold
Monday	73
Tuesday	96
Wednesday	126
Thursday	87

What is the least number of tickets Bobby must sell on Friday if he is to get his bonus?

(Total for Question 7 is 3 marks)

11 Mrs Jones is taking her family to an aquarium.

## **Ticket prices (per person)**

Adult £18.50 Child (3-16) £14.50 Child (under 3) free

Mrs Jones wants to get tickets for two adults and three children. The ages of the children are 2, 4 and 7.

Mrs Jones wants to pay in cash. The only cash that she has is four £20 notes.

Has Mrs Jones enough cash to buy the tickets? You must show all your working

(Total for Question 11 is 4 marks)

14 Jenny has a monthly pay plan for her mobile phone. Each month, she pays a total of £8.95 plus the cost of any extra minutes and any extra texts.

### Monthly pay plan

For £8.95 per month you get:

120 minutes and 1000 texts

Extra minutes: 16.5p for each minute Extra texts: 10p for each text

Last month, Jenny used 138 minutes and sent 1085 texts.

Work out how much she paid in total last month.

(Total for Question 14 is 5 marks)

#### 12 A machine makes 36 trophies every hour.

The machine makes trophies for  $8\frac{1}{2}$  hours each day, on 5 days of the week.

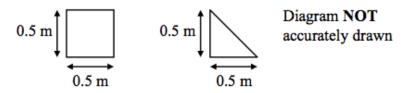
The trophies are packed into boxes.

Each box holds 8 trophies.

How many boxes are needed for all the trophies made each week?

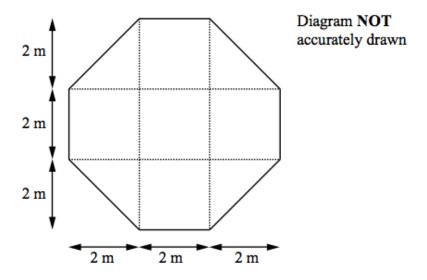
(Total for Question 12 is 4 marks)

#### 20 Derek wants to make a patio using paving stones.



He will use square paving stones and triangular paving stones as shown in the diagram above.

The patio will be in the shape of an octagon as shown below.



(a) Work out the number of each type of paving stone Derek needs.

4 A shop sells bags of crisps. The bags of crisps are delivered in boxes. There are 48 bags of crisps in each box.

In January, the shop sold all the bags of crisps in 243 boxes. In February, the shop sold all the bags of crisps in 425 boxes.

(a) Work out the total number of bags of crisps the shop sold.

(2)

7 Here is some information about the cost of carpet tiles at the Handiman Superstore.

Carpet tiles!!!

Packs of 10 for £30 a pack

Single tiles for £3.69 each

Gemma needs 68 tiles. She wants to pay the least amount.

(b) How much will she pay?

(3)

	Tariff A
	Total cost = number of minutes used $\times$ £0.03 + fixed charge
For Tariff A	, the fixed charge is £33
In January,	Sarfraz used his telephone for 400 minutes.
(a) Work ou	t the total telephone cost for this month.

£	·
	(3)

4 A school bus takes students between 3 different schools.

There are 14 students on the bus when it leaves school A.

The bus goes from school A to school B.

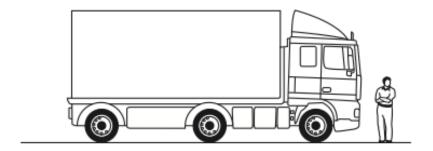
At school B, 7 students get off the bus and 5 students get on the bus.

The bus then goes from school B to school C.

At school C, 10 students get off the bus and 6 students get on the bus.

How many students are now on the bus?

(Total for Question 4 is 3 marks)



The picture shows a lorry driver standing next to his lorry. The lorry driver and the lorry are drawn to the same scale.

The lorry driver wants to drive the lorry into a car park. The entrance to the car park is 2.1 metres high.

Can the lorry driver safely drive the lorry into the car park? You must clearly show how you got your answer.

(Total for Question 20 is 3 marks)

21	An	internet	hooks	hon	uses	this	advert
41	$\Delta$ III	IIIICIIICI	OUUMS	пор	uses	шы	auvert.

Each day every 3rd customer gets a mystery prize.

Each day every 20th customer gets free postage and packaging.

On Tuesday the internet bookshop had 150 customers.

(	a	) How	many	of th	e 150	customers	got	a mystery	prize?

(b) How many of the 150 customers got free postage and packaging?

#### \*23 Here are three oil cans.







Diagrams **NOT** accurately drawn

Given that 8 pints = 1 gallon, put the cans in order of capacity.

(Total for Question 23 is 4 marks)

4 Jason is a racing driver. Jason drove 72 laps in a race.

> Jason drove the first 23 laps. Then he stopped to have his tyres changed.

Jason drove for some more laps. Then he stopped for a second time.

Jason then drove the last 20 laps of the race.

(a) Work out the number of laps between Jason's first stop and his second stop.

(3)	

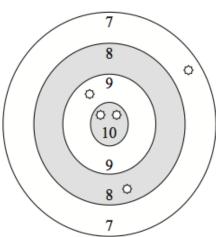
6 Parveen and Jenny are in a shooting competition. They each have 5 shots at a target.

Each time they hit the target, they score 7 or 8 or 9 or 10

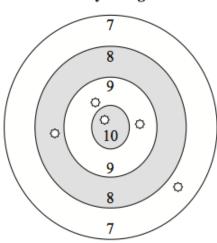
The diagrams show the results of each of their 5 shots.

• shows a shot that has hit the target





Jenny's target



The five scores are added to get the total score.

(a) Work out the difference between Parveen's total score and Jenny's total score.

		(:	3)		

11 Mrs Defoe is organising a school trip for 72 children.

The total cost of the trip is £680 The school will pay £500 towards the total cost of the trip. The children will pay the rest of the total cost.

(a) Work out how much money each child has to pay.



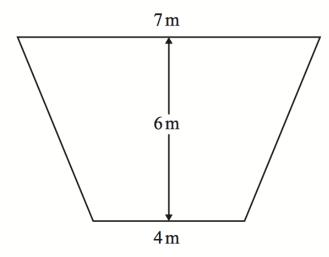


Diagram **NOT** accurately drawn

The diagram shows a floor.

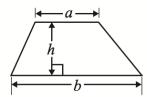
The floor is in the shape of a trapezium.

The floor is to be completely covered in carpet.

1 m<sup>2</sup> of carpet costs £8.99

Work out the total cost of the carpet needed to completely cover the floor.

# Area of trapezium = $\frac{1}{2}(a+b)h$



(Total for Question 21 is 3 marks)