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FOR WALES



Key skills application of number Adult numeracy Level 1

Monday 23 February 2004

Test Paper

YOU NEED

- This test paper
- An answer sheet
- A ruler marked in mm and cm

You may NOT use a calculator

You may use a bilingual dictionary

You may write on this paper if it helps you to work things out

Do NOT open this paper until you are told to do so by the supervisor

THERE ARE 40 QUESTIONS IN THIS TEST

Total marks available: 40

Try to answer ALL the questions

YOU HAVE 1 HOUR 15 MINUTES TO FINISH THE TEST

INSTRUCTIONS

- Make sure your personal details are entered correctly on the answer sheet
 - Read each question carefully
 - Follow the instructions on how to complete the answer sheet
 - At the end of the test, hand the test paper, your answer sheet and all notes to the supervisor
-

REMEMBER: YOU HAVE 1 HOUR 15 MINUTES TO FINISH THE TEST

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Ref: AoN/L1/2.1/P2

Questions 1 to 4 are about a firework display.

1 Eight friends go to a firework display.

The table shows the entry cost.

Adults (16 years or over)	£5.00
Children (Aged 2 years and under 16 years)	£3.00
Infants (Under 2 years)	FREE

Six of the friends are 16 years old.

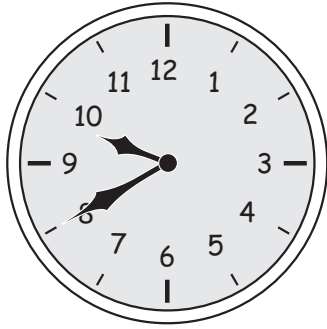
Two of them are 15 years old.

What is the total entry cost for the friends?

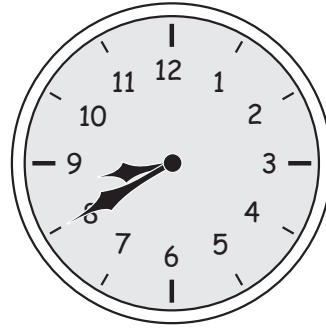
- A £28.00
- B £30.00
- C £36.00
- D £40.00

- 2 The friends arrive at the firework display at 7:25pm.
They stay for two and a quarter hours and then leave for home.

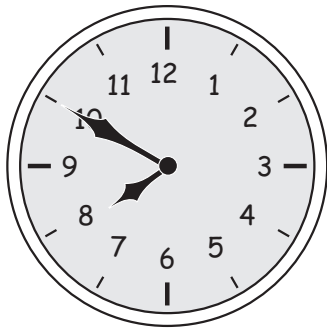
Watch a



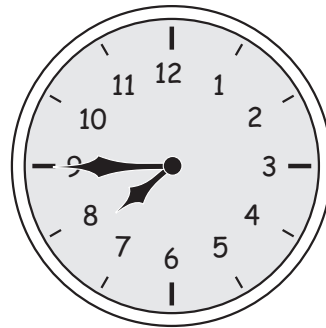
Watch b



Watch c



Watch d



Which watch face displays the time that they leave?

- A Watch a
- B Watch b
- C Watch c
- D Watch d

- 3 The table shows the prices of refreshments.

Refreshments

Pasties	£2.00 each
Baked potatoes	£2.49 each
Sausage rolls	£1.50 each

One visitor buys one baked potato and two sausage rolls.

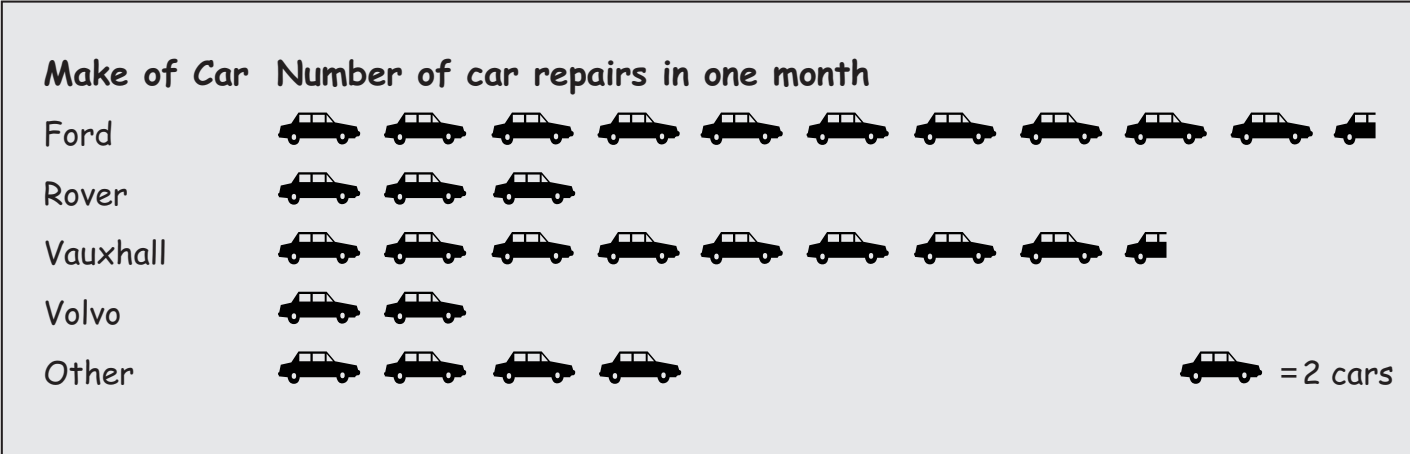
The total bill is £5.49

Which reverse calculation can the visitor use to check the bill?

- A $£5.49 + £1.50 + £1.50 + £2.49$
 - B $£5.49 - £1.50 - £1.50 - £2.49$
 - C $£5.49 + £1.50 + £2.49 + £2.49$
 - D $£5.49 - £1.50 - £2.49 - £2.49$
- 4 The organisers have one steward for every 50 visitors.
There are 850 visitors at the firework display.
How many stewards do they have?
- A 15
 - B 16
 - C 17
 - D 18

Questions 5 to 8 are about a garage.

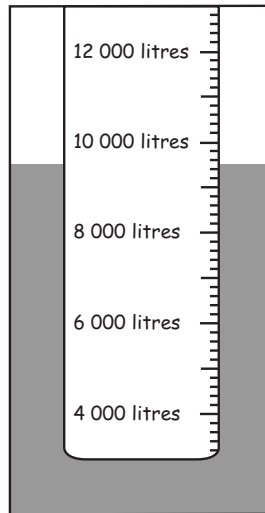
5 The pictogram below shows the number of car repairs done in one month.



The number of Vauxhall cars repaired in one month was

- A 9
- B 17
- C 18
- D 21

- 6 The diagram shows the amount of fuel in a storage tank.

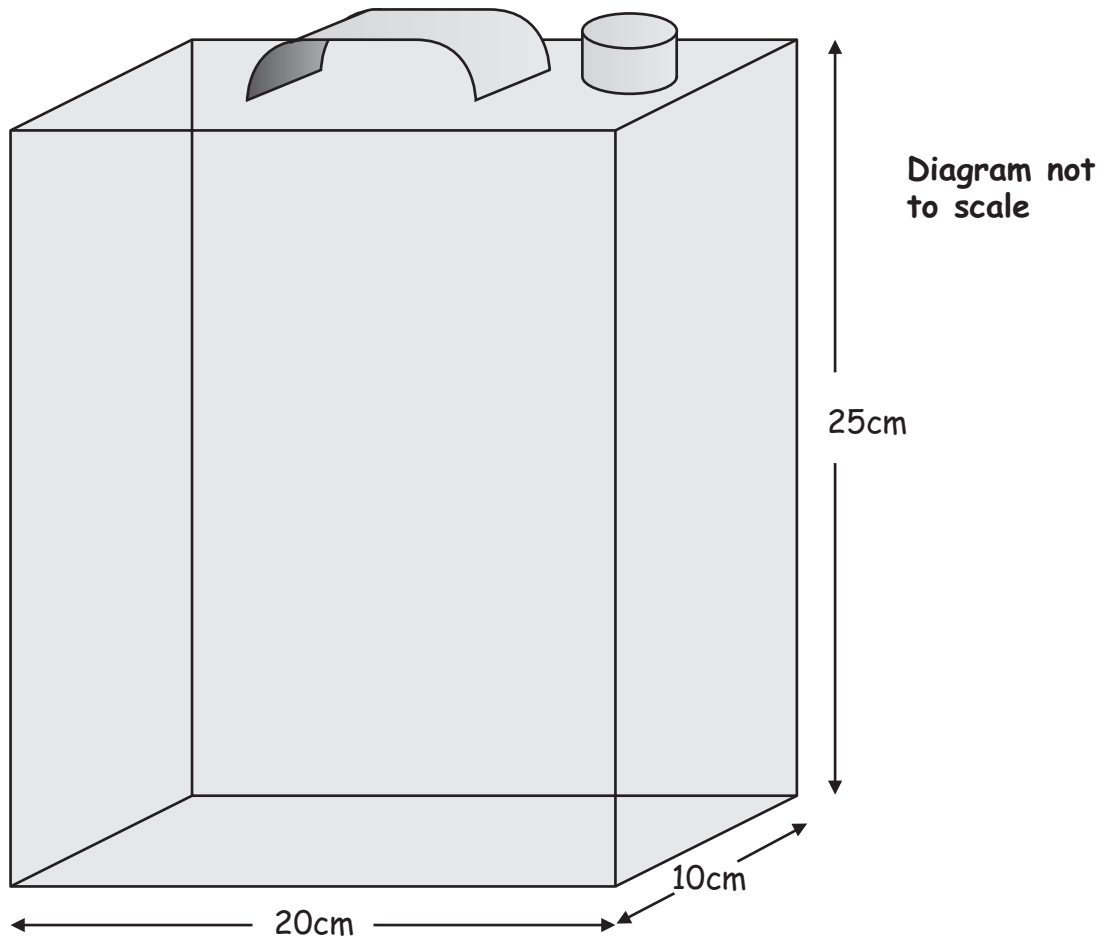


How much fuel is in the tank?

- A 8750 litres
B 9500 litres
C 9750 litres
D 10250 litres
- 7 The repair bay is 11.8 metres long and 6.2 metres wide.
The owner calculates the area as 73.2 square metres.
Which calculation gives the closest estimate of the area of the repair bay?
- A 11×6
B 11×7
C 12×6
D 12×7

8 This is a diagram of a petrol can.

PETROL CAN



How much petrol does the can hold when it is full?

- A 55cm^3
- B 500cm^3
- C 755cm^3
- D $5\,000\text{cm}^3$

Questions 9 to 12 are about a doctor's surgery.

A doctor keeps a record of the number of patients seen on five days.

Patients seen by the doctor				
Monday	Tuesday	Wednesday	Thursday	Friday
20	15	18	15	16

9 Which calculation gives the average (mean) number of patients seen each day by the doctor on these five days?

A
$$\frac{20 + 15 + 18 + 15 + 16}{5}$$

B
$$\frac{20 + 15 + 18 + 15 + 16}{7}$$

C
$$\frac{5}{20 + 15 + 18 + 15 + 16}$$

D
$$\frac{7}{20 + 15 + 18 + 15 + 16}$$

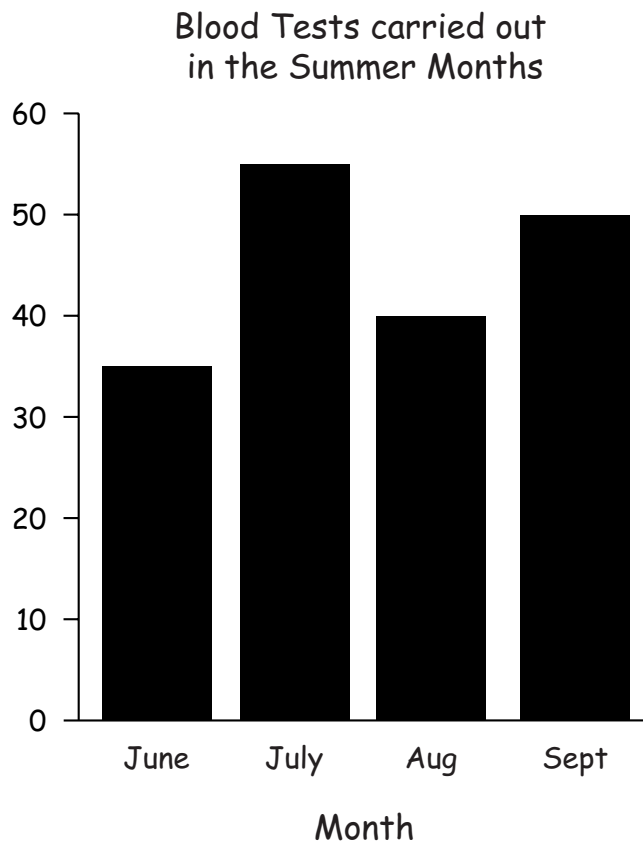
10 What is the range of the number of patients seen by the doctor?

- A 4
- B 5
- C 15
- D 16

11 The nurse sees 24 patients.
She weighs $\frac{3}{4}$ of these patients.
How many patients does she weigh?

- A 6
- B 8
- C 16
- D 18

12 The nurse draws the chart below.



What is missing from the chart?

- A a key for the chart
- B a label on the vertical axis
- C a label on the horizontal axis
- D a title for the chart

Questions 13 to 16 are about building work.

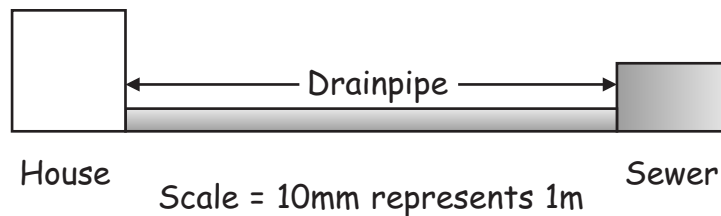
A builder has a contract to build 25 houses.

13 The builder orders 2 356 bags of cement.

How many bags of cement is this to the nearest 10?

- A 2 300
- B 2 350
- C 2 360
- D 2 400

14 The builder lays a drainpipe from a house to the sewer.



What is the actual length of the drainpipe from the house to the sewer?

- A 6.5cm
- B 65cm
- C 6.5m
- D 65m

15 In one house the kitchen measures 4 metres by 5 metres.

The builder works out the floor area as 20 units.

The unit for the floor area is

- A m
- B m^2
- C m^3
- D cm

16 The manager keeps a record of work days lost through illness in his building company.

The table below shows the number of work days lost through illness each month for six months.

Month	Number of work days lost through sickness
February	50
March	35
April	15
May	30
June	20
July	25

The manager wants to show this information on a pictogram with 'bricks' standing for the number of work days lost.

The best key to use is one brick stands for

- A 1 day
- B 10 days
- C 50 days
- D 100 days

Questions 17 to 19 are about a concert for charity.

17 Thirty-two thousand, four hundred and eight people attend a concert for charity.

In figures this is

- A 32408
- B 32480
- C 324008
- D 3200408

18 A concert ticket costs £30

The organisers donate $\frac{2}{5}$ of this to charity.

The amount of money donated from each ticket sale to charity is

- A £6
- B £10
- C £12
- D £18

19 The organisers employ 250 security guards.

The security guards are each paid £7 an hour.

They each work 5 hours.

The total amount paid for the security guards is

- A £875
- B £1750
- C £7500
- D £8750

Questions 20 to 25 are about a supermarket.

20 A supermarket has 900 customers in one day.

60% of these buy milk.

How many customers buy milk?

- A 150
- B 360
- C 540
- D 600

21 A plastic bottle of milk contains 2.272 litres.

The volume of milk in the plastic bottle to the nearest one-tenth of a litre is

- A 2.2 litres
- B 2.3 litres
- C 2.27 litres
- D 2.28 litres

22 The supermarket has a Special Offer.

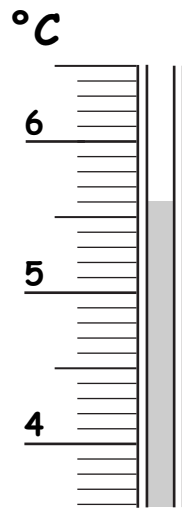
TURKEY BREASTS Normal Price £2.99 for 1 pack Special Offer £4.48 for 2 packs
--

A customer buys 2 packs of turkey breasts.

How much cheaper is it to buy 2 packs on Special Offer than 2 packs at the Normal Price?

- A £0.50
- B £1.49
- C £1.50
- D £2.99

23 An assistant checks the temperature in a chill cabinet.
The diagram shows the reading on the thermometer.



The reading on the thermometer is

- A 5.3°C
- B 5.5°C
- C 5.6°C
- D 6.4°C

24 A notice in the supermarket shows today's bargains.

Today's Bargains	
Biscuits	89p
Fruit Pies	£2.45
Gateaux	£2.68

A customer buys 5 packets of biscuits and 2 fruit pies.

How much does she pay in total?

- A £4.45
- B £9.35
- C £10.01
- D £14.03

25 The normal price of fuel is 73.9p for each litre.

A customer has a voucher for '2p off' each litre of fuel she buys.









The customer buys 20 litres of fuel.

How much does she pay?

- A £ 7.19
- B £ 7.39
- C £14.38
- D £14.78

Questions 26 to 30 are about a hair and beauty salon.

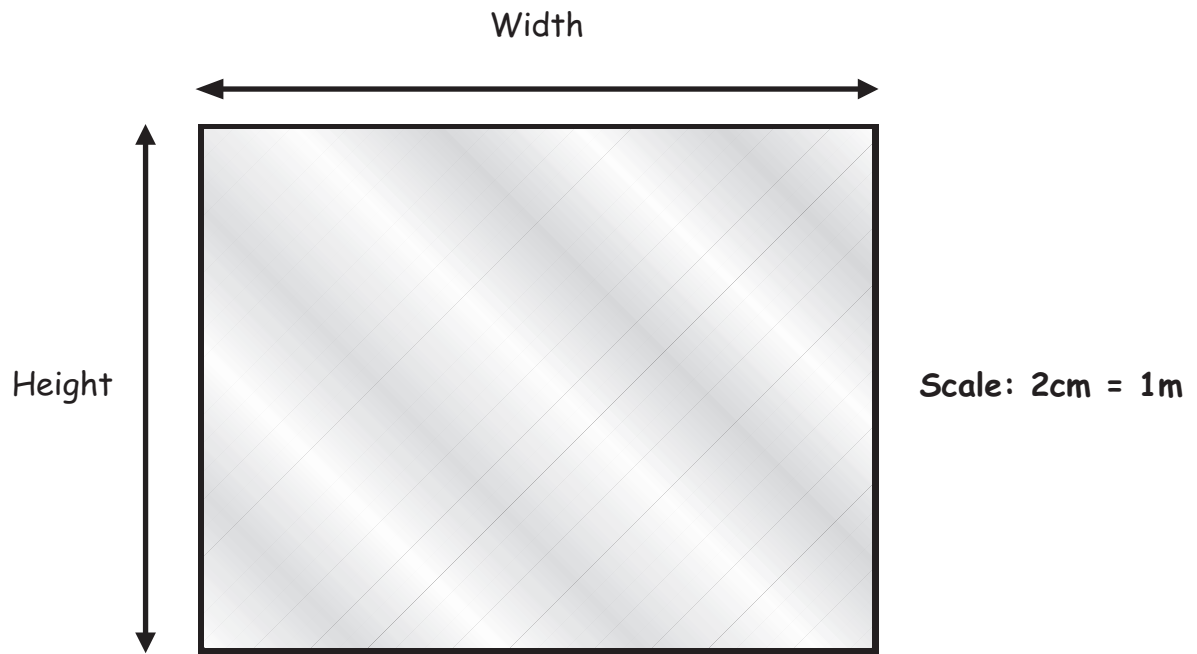
26 The salon receptionist makes a tally of the number of client appointments for each stylist on Wednesday.

Hannah	Alice	Ian	Ray
			
			
			

How many more appointments has Ian than Alice on that Wednesday?

- A 1
- B 3
- C 4
- D 5

27 A scale drawing shows the salon window.



What is the real height of the salon window?

- A 3.5m
- B 4.5m
- C 7.0m
- D 14.0m

28 The beauty treatment room is 4 metres long and 2.5 metres wide.

What is the floor area of the beauty treatment room?

- A 6.5m^2
- B 8.0m^2
- C 10.0m^2
- D 13.0m^2

29 A manicure costs £15

There is a 20% reduction in the cost every Wednesday.

How much does a manicure cost on a Wednesday?

- A £3
- B £5
- C £10
- D £12

30 The hairdresser mixes a total of 36 millilitres of colour.

He uses twice as much copper colour as base colour.

Which colour mix is correct?

- A 9ml copper and 27ml base colour
- B 12ml copper and 24ml base colour
- C 24ml copper and 12ml base colour
- D 27ml copper and 9ml base colour

Questions 31 to 33 are about television viewing.

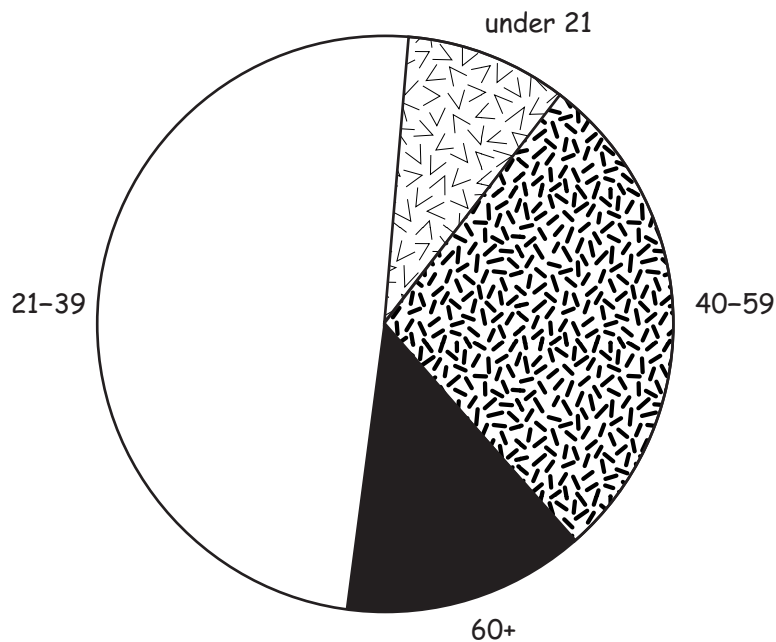
31 A television programme attracts 875 200 viewers.

The number of viewers written in words is

- A eight million, seven hundred and fifty-two thousand
- B eighty-seven thousand, five hundred and twenty
- C eighty-seven thousand, fifty-two hundred
- D eight hundred and seventy-five thousand, two hundred

32 The pie chart shows the ages of viewers who watch a television programme.

Ages of television programme viewers



The pie chart shows that

- A about half the viewers are in the 60+ age group
- B the smallest group of viewers is the 40-59 age group
- C most of the viewers are in the under 21 age group
- D most viewers are in the 21-39 age group

- 33** A viewer can record 3 hours of programmes on a new videotape. She records a television programme 1hr 40min long on the tape. How much recording time is left on the videotape?
- A 1hr 20min
 - B 1hr 40min
 - C 2hr 20min
 - D 2hr 40min

Questions 34 to 36 are about a health club.

- 34** The club records show that two-fifths of members are over 30 years of age.

Two-fifths as a percentage is

- A 12%
 - B 20%
 - C 25%
 - D 40%
- 35** One club member keeps a record of the time he spends working out on an exercise machine each day in one week.

Number of minutes spent on an exercise machine

Mon	Tues	Weds	Thurs	Fri	Sat	Sun
44	41	41	45	41	40	42

What is the average (mean) amount of time he spends each day on this exercise machine?

- A 40min
- B 41min
- C 42min
- D 45min

36 A club member weighs 56.8 kilograms.

What is her weight to the nearest kilogram?

- A 50kg
- B 56kg
- C 57kg
- D 60kg

Questions 37 to 40 are about a holiday.

37 A family go on a 10-day holiday to Europe.

The table shows prices for holiday insurance.

INSURANCE	ADULT	COUPLE	FAMILY
Europe 1 week (up to 8 days)	£15	£24	£40
Europe 2 weeks (up to 15 days)	£25	£45	£50
Europe for 1 year	£30	£55	£75
World Wide 1 week (up to 8 days)	£30	£48	£70
World Wide 2 weeks (up to 15 days)	£45	£65	£100
World Wide for 1 year	£56	£99	£125

The family buy insurance just for their 10-day holiday in Europe.

How much do they pay for insurance?

- A £40
- B £50
- C £80
- D £100

38 It costs £21.50 each day for the family to hire a car.

The family hire a car for 5 days.

How much does it cost?

- A £105.00
- B £105.25
- C £105.50
- D £107.50

39 The family spend 30% of their money on food.

30% written as a fraction is

- A $\frac{3}{100}$
- B $\frac{3}{10}$
- C $\frac{1}{3}$
- D $\frac{100}{30}$

40 The temperatures at 12 noon for the first 5 days of the holiday are

	Monday	Tuesday	Wednesday	Thursday	Friday
Temperature (°C)	19	19	23	21	28

What is the average (mean) daily temperature at 12 noon over these 5 days?

- A 19°C
- B 21°C
- C 22°C
- D 23°C

End of test