



AWDURDOD
CYMHWYSTERAU,
CYMRU
QUALIFICATIONS,
CURRICULUM &
ASSESSMENT AUTHORITY
FOR WALES



Key skills application of number Adult numeracy Level 1 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

INSTRUCTIONS TO CENTRES

- This paper must not be photocopied

First published in 2004.

© Qualifications and Curriculum Authority 2004.

Reproduction, storage, adaptation or translation, in any form or by any means, of this publication is prohibited without prior written permission of the publisher, unless within the terms of licences issued by the Copyright Licensing Agency.

Printed in Great Britain.

The Qualifications and Curriculum Authority is an exempt charity under Schedule 2 of the Charities Act 1993.

Qualifications and Curriculum Authority, 83 Piccadilly, London W1J 8QA. www.qca.org.uk

Ref: Ao/NL/1/3.2/P39/URN:187

Questions 1 to 4 are about employment programmes for young people.

- 1 Nationally, 340 000 young people who have taken part in employment programmes have found work.

In words this is

- A thirty-four thousand
- B three hundred and forty thousand
- C three million and forty thousand
- D thirty-four million

- 2 Youth unemployment in a particular area has fallen by 70% in the last five years.

What is 70% as a fraction?

A $\frac{1}{70}$

B $\frac{7}{100}$

C $\frac{1}{7}$

D $\frac{7}{10}$

- 3 A full-time Youth Worker earns £15 000 a year for 35 hours a week. A job advert is for a part-time Youth Worker for only 20 hours a week.

Which calculation gives the earnings for the part-time worker?

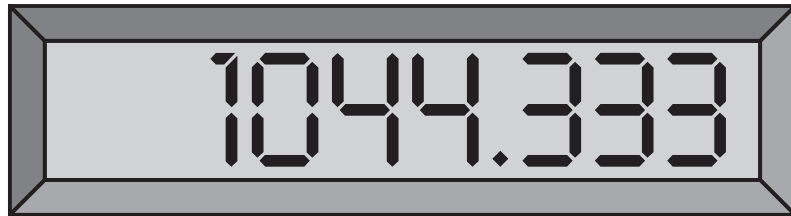
A $15\,000 \times 20 \div 35$

B $15\,000 \times 20 \times 35$

C $15\,000 \div 20 \times 35$

D $15\,000 \div 20 \div 35$

- 4 The Youth Worker's clerk earns £12 532 a year.
She divides this by 12 using a calculator to find the monthly pay.
The calculator display shows her answer in pounds



What is the monthly pay to two decimal places?

- A £1044.00
- B £1044.30
- C £1044.33
- D £1044.34

Please go on to the next page

Questions 5 to 10 are about a trainee working in the post room of a company.

5 The table shows the cost of posting letters.

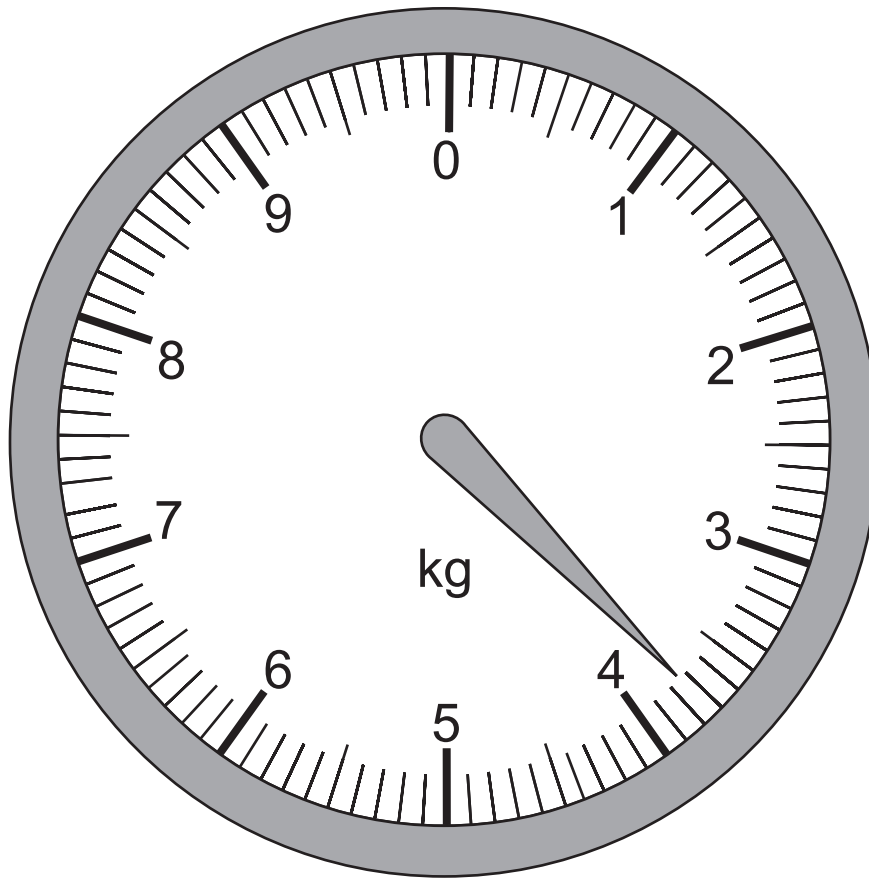
Postage costs

Weight up to	First Class	Second Class
350g	£1.15	91p
400g	£1.37	£1.10
450g	£1.56	£1.25
500g	£1.74	£1.42

What is the cost of posting a second class letter weighing 480g?

- A £1.25
- B £1.42
- C £1.56
- D £1.74

- 6 The trainee weighs a parcel.
The diagram shows the reading on the weighing scale.



How much does the parcel weigh?

- A 3.7kg
- B 3.75kg
- C 3.8kg
- D 4.25kg

- 7 She checks the postage rate on some overseas items at the Post Office.
She pays to post an airmail letter to India costing £1.42 and three packets to France costing £1.20 each.

Which calculation finds her change from £10.00?

- A $£10.00 + £1.42 - £1.20 \times 3$
- B $£10.00 + £1.42 + £1.20 \times 3$
- C $£10.00 - £1.42 - £1.20 \times 3$
- D $£10.00 - £1.42 + £1.20 \times 3$

- 8 The table shows the weights of seven parcels for posting.

weight of parcel

8kg	1kg	3kg	4kg	7kg	3kg	2kg
-----	-----	-----	-----	-----	-----	-----

What is the average (mean) weight of the parcels?

- A 3kg
 - B 4kg
 - C 6kg
 - D 7kg
- 9 The total amount spent by the company on postage last month was £362.78
To the nearest pound this is
- A £362.00
 - B £362.70
 - C £362.80
 - D £363.00

10 The company is in Bradford.

The Post Office publishes the percentage of correctly addressed post for each town.

Town	Percentage of correctly addressed post
Bolton	95%
Bradford	93%
Dartford	96%
Norwich	92%
Slough	90%

Chart a

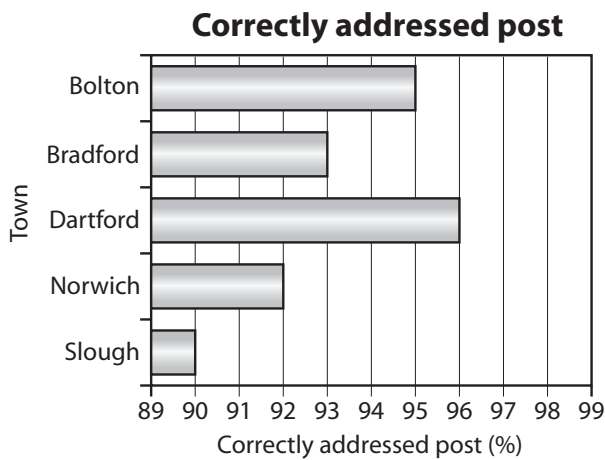


Chart b

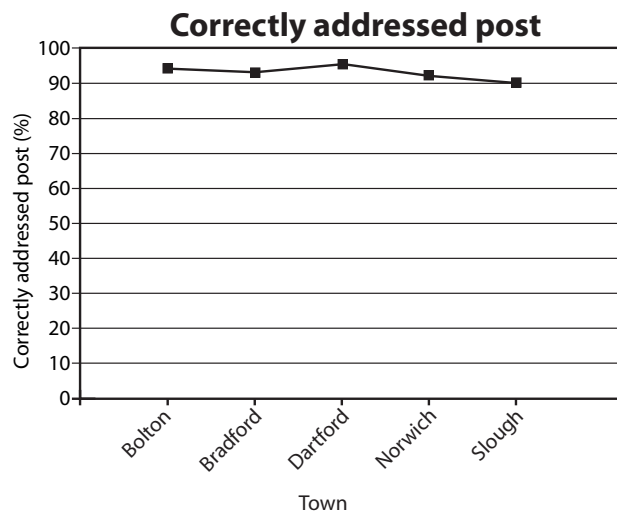


Chart c

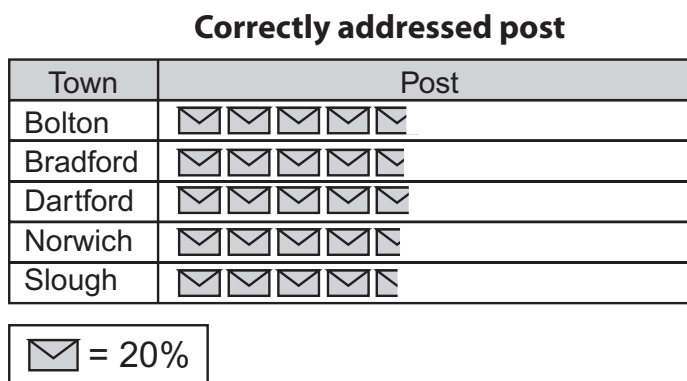
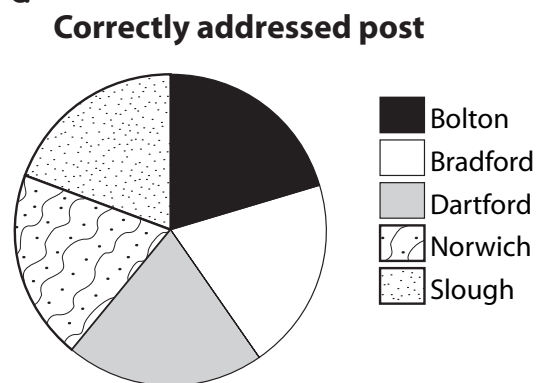


Chart d



Which chart shows these percentages **most** accurately?

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

Questions 11 to 16 are about friends playing a board game.

Players try to make toy money by buying 'property' cards and charging other players rent if they land on the 'property' owned.

- 11** The table shows the rent for two 'properties' in the game: Fleet Street and Trafalgar Square.

The amount of rent depends on the number of houses on the 'property'.

	Fleet Street	Trafalgar Square
Rent with 0 houses	£18	£20
Rent with 1 house	£90	£100
Rent with 2 houses	£250	£300
Rent with 3 houses	£700	£750
Rent with 4 houses	£875	£925
Rent with HOTEL	£1050	£1100

What is the rent for Fleet Street with three houses?

- A £250
 - B £700
 - C £750
 - D £875
- 12** A player pays £175 rent for landing on Park Lane with one house.

She pays with a £500 note.

How much change should she receive?

- A £275
- B £325
- C £425
- D £475

13 A player wants to buy some houses to increase the rent he can charge.
New houses cost £150 each.
What is the maximum number of houses he can afford to buy with £975?

- A 4
- B 5
- C 6
- D 7

14 Sometimes players have to take a 'Chance' card.
The game has a pack of sixteen 'Chance' cards.
Four of the 'Chance' cards pay out money.
What fraction of 'Chance' cards pay out money?

- A $\frac{4}{11}$
- B $\frac{4}{9}$
- C $\frac{1}{3}$
- D $\frac{1}{4}$

15 One player is short of money and borrows £160
Later he repays the loan plus 10% interest.
What is 10% of £160?

- A £1.00
- B £1.60
- C £10.00
- D £16.00

16 The table shows the cost of buying a 'property' card.

Property	Bond St	Euston Rd	Liverpool St Station	Mayfair	Oxford St	Piccadilly	Whitechapel Rd	Whitehall
Card value	£320	£100	£200	£400	£300	£280	£60	£140

What is the range of 'property' card values?

- A £180
- B £225
- C £340
- D £400

Questions 17 to 22 are about a family planning a short holiday including a day out at the National Exhibition Centre (NEC), Birmingham.

17 The chart shows the distances in miles from different cities to Birmingham.

London						
120	Birmingham					
120	88	Bristol				
78	208	206	Dover			
412	296	379	499	Glasgow		
204	89	172	291	218	Manchester	
241	203	125	287	494	286	Plymouth

The family lives in Manchester.

What is the distance from Manchester to Birmingham according to the chart?

- A 88 miles
- B 89 miles
- C 203 miles
- D 218 miles

18 One member of the family hires a wheelchair.

The cost of hiring a wheelchair is £2.50 per day and a single insurance payment of £5

Which calculation finds the cost for three days?

- A $£5.00 + £2.50 \times 3$
- B $£5.00 - £2.50 \times 3$
- C $£5.00 - £2.50 \div 3$
- D $£5.00 + £2.50 \div 3$

19 At the NEC, day tickets for adults cost £13.50 each.

Day tickets for children cost £8.50 each.

What is the total cost of day tickets for two adults and a child?

- A £40.50
- B £35.50
- C £34.50
- D £24.50

20 Their map of the NEC gives the distances from the car parks to the site exits in fractions of a mile.

Which is the correct order, largest to smallest?

- A $\frac{3}{4}$ mile, $\frac{2}{3}$ mile, $\frac{1}{3}$ mile, $\frac{1}{2}$ mile
- B $\frac{3}{4}$ mile, $\frac{2}{3}$ mile, $\frac{1}{2}$ mile, $\frac{1}{3}$ mile
- C $\frac{2}{3}$ mile, $\frac{3}{4}$ mile, $\frac{1}{2}$ mile, $\frac{1}{3}$ mile
- D $\frac{1}{2}$ mile, $\frac{2}{3}$ mile, $\frac{1}{3}$ mile, $\frac{3}{4}$ mile

21 The distance on a map from the NEC to their hotel is 60 millimetres.

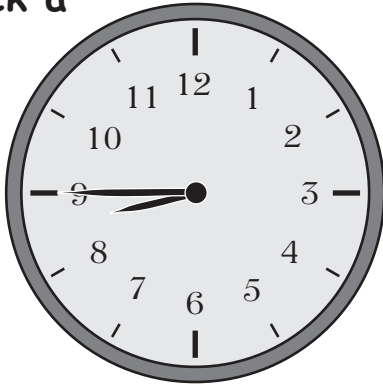
The scale on the map is 10 millimetres to 4 kilometres.

How far is the NEC from their hotel?

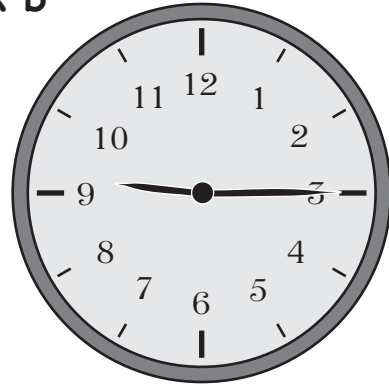
- A 6 kilometres
- B 15 kilometres
- C 24 kilometres
- D 60 kilometres

22 The next day the family leaves the hotel at 0730 to visit a friend. The car journey should take two-and-a-quarter hours.

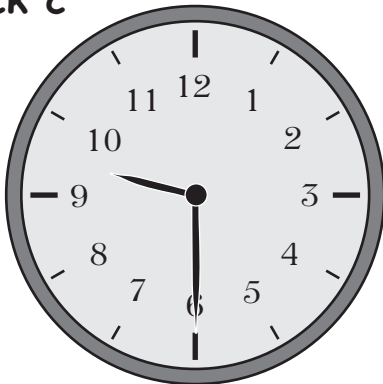
Clock a



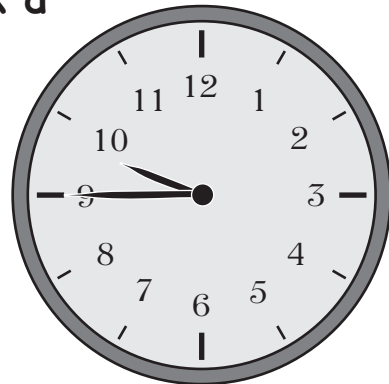
Clock b



Clock c



Clock d



Which clock shows the time they should arrive?

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

Questions 23 to 27 are about a gardener.

23 The table shows the cost of different sized bags of compost at a garden centre.

Size of bag	Cost
10 litres	£1.98
20 litres	£2.48

The gardener needs 40 litres of compost.

Which calculation shows the amount of money saved by buying two bags of 20 litres instead of four bags of 10 litres?

- A $(4 \times \text{£}1.98) - (2 \times \text{£}2.48)$
- B $(4 \times \text{£}1.98) + (2 \times \text{£}2.48)$
- C $(2 \times \text{£}2.48) - (4 \times \text{£}1.98)$
- D $(2 \times \text{£}2.48) + (4 \times \text{£}1.98)$

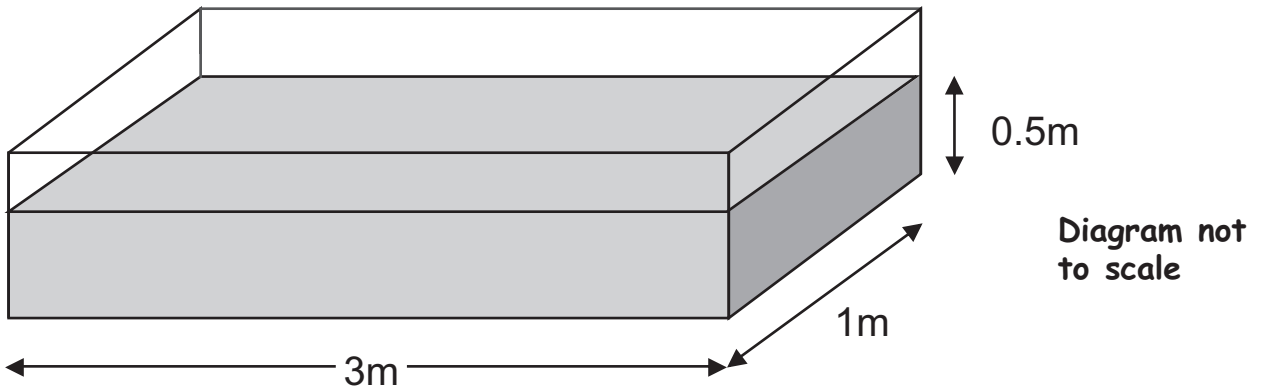
24 The gardener mixes soil, peat and sand to make seed compost.

He mixes 2 parts of soil with 1 part of peat and 1 part of sand.

How much peat does he use to make 32 litres of compost?

- A 4 litres
- B 8 litres
- C 16 litres
- D 24 litres

25 A raised rectangular flower bed is 3 metres long and 1 metre wide.

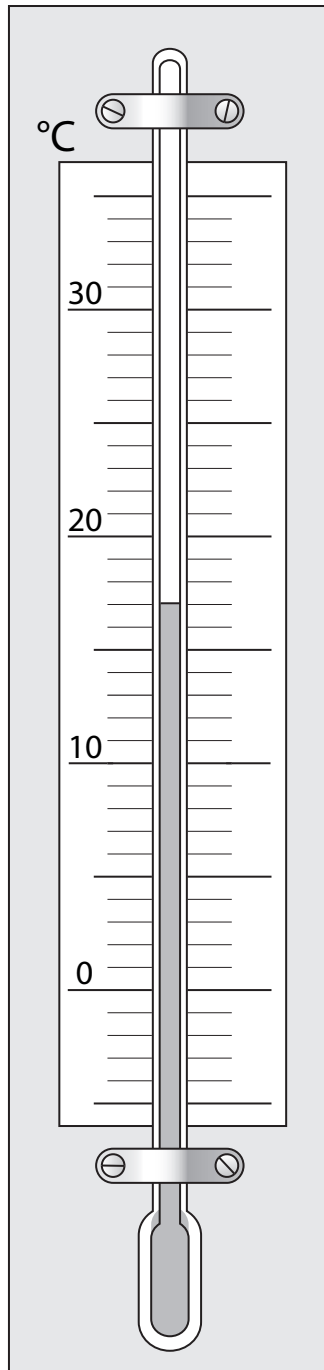


How much compost is needed to fill it to a depth of 0.5 metres?

- A 1.5m^3
- B 3.0m^3
- C 4.5m^3
- D 8.0m^3

Please go on to the next page

26 Seeds need a temperature between 13°C and 18°C to grow.
The gardener checks the temperature of the greenhouse.



What temperature does the thermometer show?

- A 14°C
- B 17°C
- C 23°C
- D 26°C

27 The table shows the midday temperature recorded for six days.

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
Temperature	17°C	13°C	12°C	14°C	15°C	13°C

What is the average (mean) midday temperature?

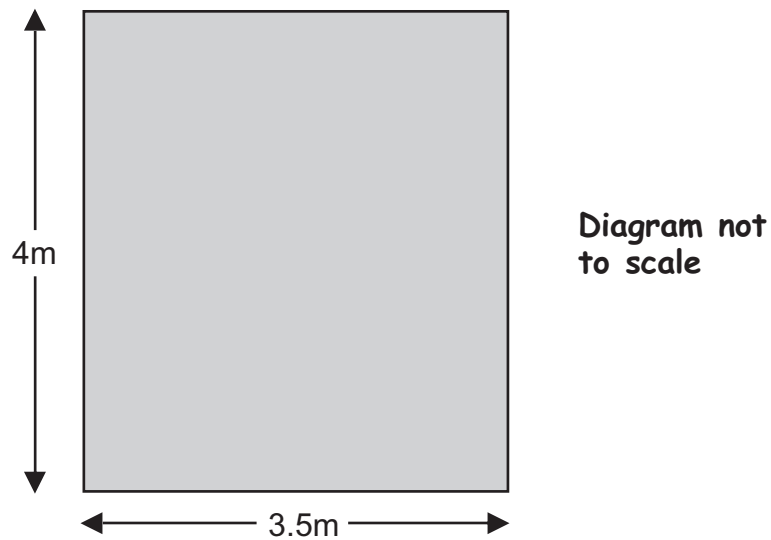
- A 17°C
- B 14°C
- C 13°C
- D 5°C

Please go on to the next page

Questions 28 to 33 are about a carpet store.

28 An assistant in the store works out the area of a room for a customer.

The diagram shows the room.



What is the area of this rectangular room?

- A 7.5m^2
- B 11.5m^2
- C 14.0m^2
- D 15.0m^2

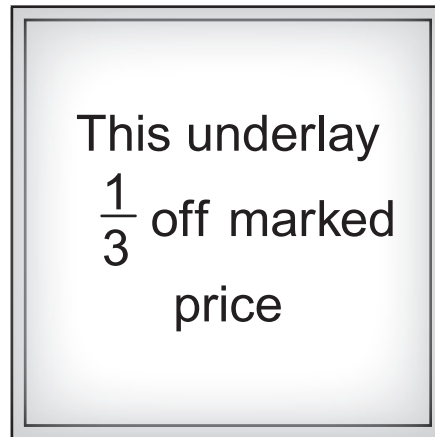
29 The assistant calculates the area of another room as 8.825m^2

What is 8.825m^2 to the nearest square metre?

- A 8m^2
- B 8.8m^2
- C 8.9m^2
- D 9m^2

30 Underlay goes under a carpet.

One type of underlay has a marked price of £4.50 a square metre.



What is $\frac{1}{3}$ of £4.50?

- A £1.33
- B £1.35
- C £1.50
- D £3.00

31 Another customer shows the assistant a plan with a scale of 2 centimetres : 1 metre.

On the plan a new room is 9 centimetres long.

How long is the new room?

- A 2.0m
- B 4.5m
- C 9.0m
- D 18.0m

32 The customer orders 32 square metres of carpet costing £7.99 a square metre.

How much does the carpet cost?

A £183.77

B £232.58

C £248.01

D £255.68

33 The store sells foam-backed and non foam-backed carpets.

The ratio of sales is usually 3 foam-backed carpets : 2 non foam-backed carpets.

Out of 30 carpet sales, how many are likely to be foam-backed?

A 10

B 12

C 15

D 18

Questions 34 to 40 are about caring for a baby.

34 A portion of apple cereal gives a baby 20% of the vitamin B1 needed each day.

20% is the same as

A $\frac{1}{20}$

B $\frac{1}{5}$

C $\frac{1}{4}$

D $\frac{1}{2}$

35 A carer buys the following items

 baby milk powder £5.57

 cereal £2.19

 juice £1.35

 sterilising fluid for bottles 97p

What is the total cost of these items?

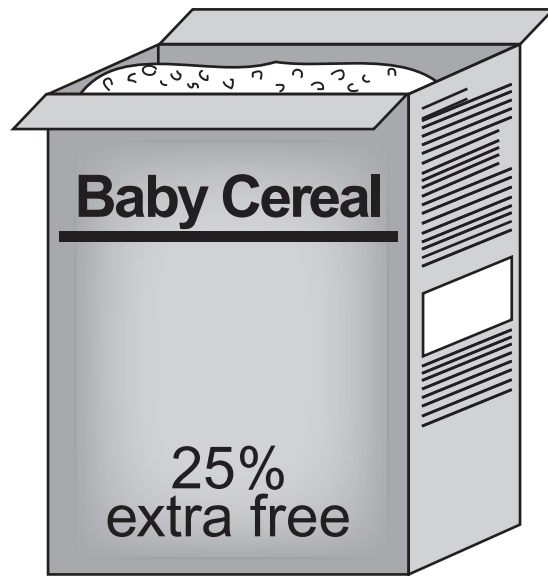
A £8.88

B £9.11

C £10.08

D £18.81

36 A standard cereal packet weighs 120g.



What is 25% of 120g?

- A 15g
- B 24g
- C 25g
- D 30g

37 A supermarket sells tins of baby food.

Baby Food
8 tins for £2.00

The carer buys 8 tins.

What is the average cost of each of these tins?

- A 24p
- B 25p
- C 40p
- D 50p

38 Milk powder is measured out in scoops per baby feeding bottle.

One scoop of milk powder weighs 4.4 units.

The weight could be

- A 4.4ml
- B 4.4mm
- C 4.4kg
- D 4.4g

39 In a kitchen cupboard there are some jars of baby food.

The carer sorts the jars into sweet and savoury.

savoury	savoury	sweet	sweet	savoury	sweet	sweet	savoury	savoury	sweet
sweet	sweet	savoury	savoury	savoury	sweet	savoury	savoury	sweet	savoury
sweet	sweet	sweet	savoury	savoury	savoury	sweet	savoury	savoury	

Which tally chart is correct?

Chart a

Sweet			
Savoury			

Chart b

Sweet			
Savoury			

Chart c

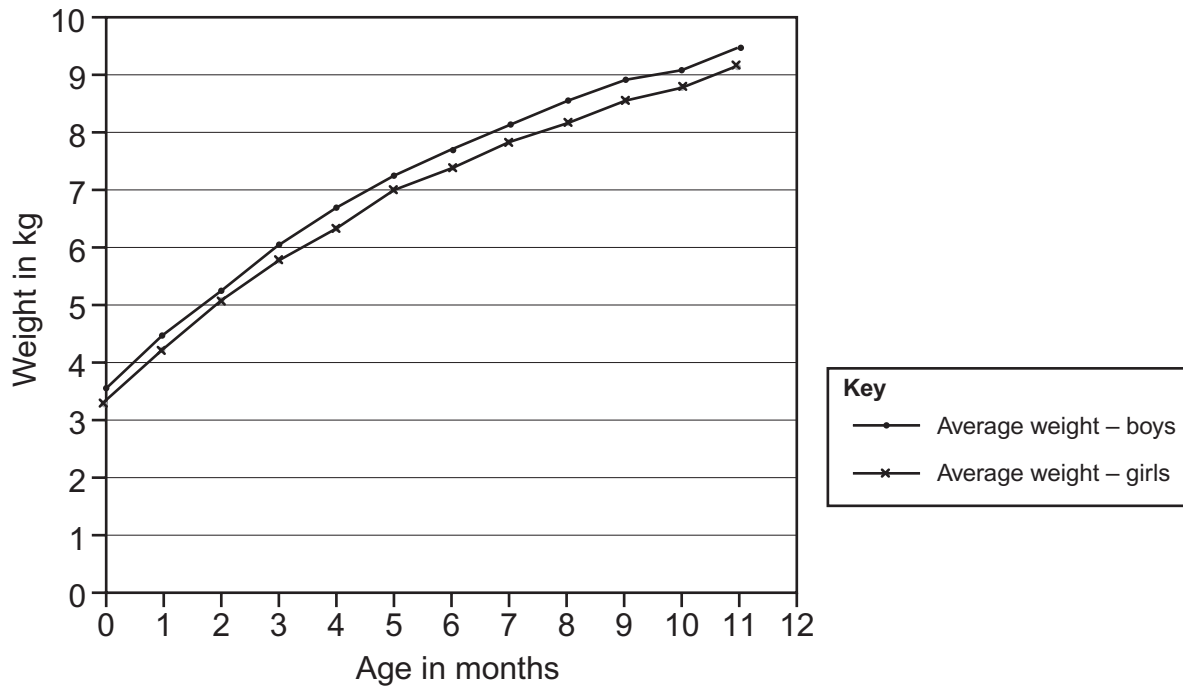
Sweet			
Savoury			

Chart d

Sweet			
Savoury			

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

40 The graph shows the national average weight of babies in their first year.



What is missing from the graph?

- A a label on the x axis
- B a label on the y axis
- C a key
- D a title

End of test