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QUALIFICATIONS,  
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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

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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**

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## 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

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

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## INSTRUCTIONS TO CENTRES

- This paper must not be photocopied

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Ref: AoN-L1-S4\_B-P3-v7.0-URN:521

Questions 1 to 5 are about a national fun run for charity.

**1** Last year the run raised £9 000 000 for charity.

What is this amount of money in words?

- A ninety million pounds
- B nine million pounds
- C nine hundred thousand pounds
- D ninety thousand pounds

**2** This year there are 49 628 runners.

How many runners is this to the nearest ten?

- A 49 600
- B 49 620
- C 49 630
- D 50 000

**3** One runner raises £374 for charity for each mile he runs.  
The fun run is 13 miles long.

Which of these calculations gives the closest estimate of the amount he raises for charity on this fun run?

- A  $10 \times 300$
- B  $10 \times 400$
- C  $20 \times 300$
- D  $20 \times 400$

- 4** A helper takes 42 cases of bottled water to two refreshment stations. She must share the water between the green station and the blue station in the ratio of

1 for green : 2 for blue

How many cases of bottled water should she take to the green station?

- A** 14  
**B** 20  
**C** 21  
**D** 28
- 5** 3 000 people run to raise money for heart charities. They aim to raise £450 000 between them.
- What is 450 000 divided by 3 000?

- A** £15  
**B** £116  
**C** £117  
**D** £150

**Please go on to the next page**

Questions 6 to 13 are about a travelling consultant.

- 6 The consultant drives from her office to visit a customer.  
The distance on the map is 21cm.  
The scale of the map is 1cm to 10km.

The actual distance is

- A 210km
- B 31km
- C 21km
- D 2.1km

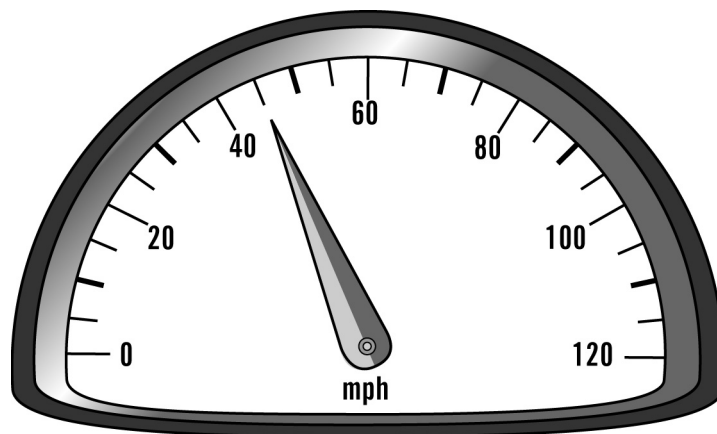
- 7 The consultant checks her car's fuel gauge before she starts the journey.  
The tank is  $\frac{3}{4}$  full.

A full tank holds 72 litres of petrol.

How much petrol is in the tank?

- A 18 litres
- B 24 litres
- C 36 litres
- D 54 litres

- 8 She checks her speedometer during the journey.



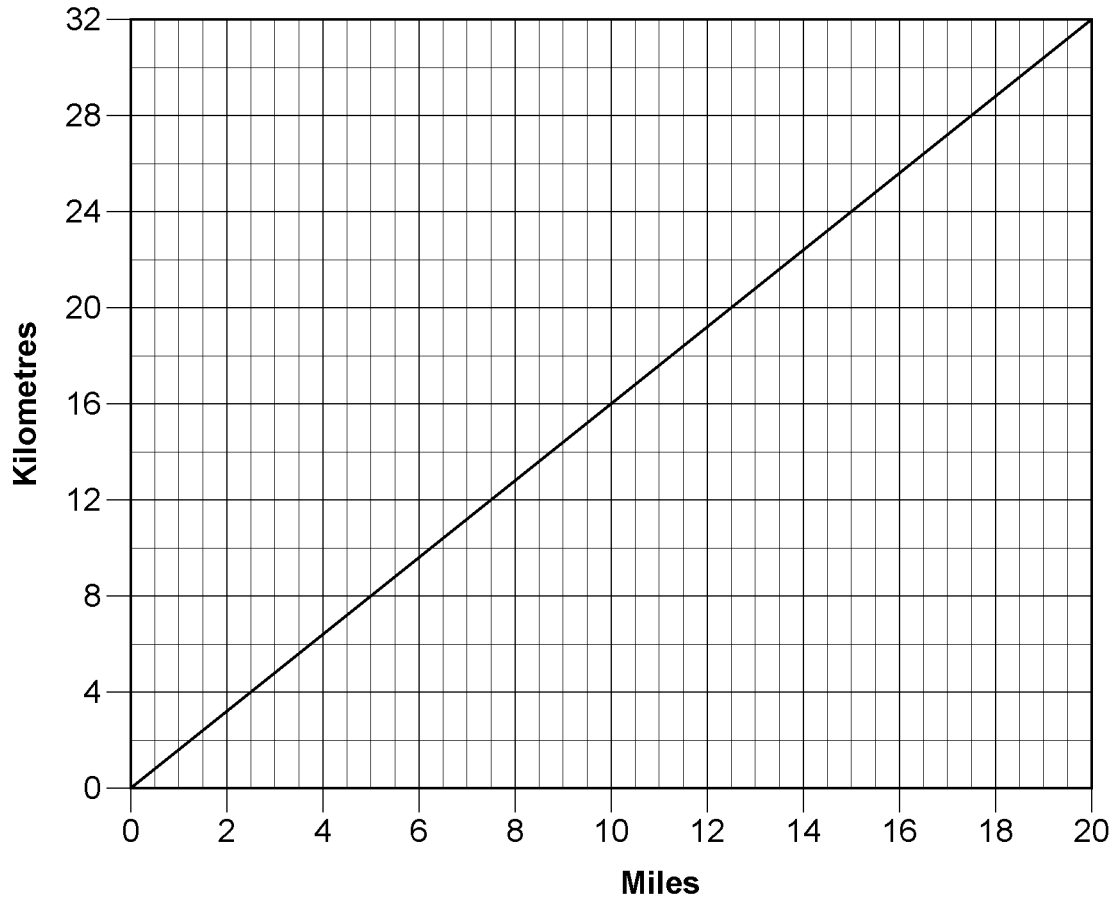
The reading on the speedometer is

- A 42mph
- B 44mph
- C 45mph
- D 50mph

9

The consultant receives petrol expenses for each **mile** she travels. She uses this graph when she travels in Europe to change kilometres to miles.

**Graph to change kilometres to miles**



One journey is 28 kilometres.

What is 28 kilometres in miles?

- A 18 miles
- B 17.75 miles
- C 17.5 miles
- D 17 miles

**10** On another journey the consultant drives 40 miles.  
She receives petrol expenses of 33.5p for each mile she drives.  
How much does she receive in petrol expenses for the 40-mile journey?

- A £1.34
- B £3.40
- C £12.40
- D £13.40

**11** The consultant records the time she spends with each customer.  
She visits 5 customers.

45mins	70mins	30mins	15mins	15mins
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The average (mean) time she spends with each customer is

- A 15mins
- B 30mins
- C 35mins
- D 55mins

**12** She expects to receive one order for every three visits she makes.  
She makes 60 visits.

How many orders does she expect to receive?

- A 15
- B 18
- C 20
- D 30

**13** She earns 5% commission on the value of her orders.  
The value of one order is £1 640

Her commission on this order is

- A £50
- B £82
- C £164
- D £328

**Please go on to the next page**

Questions 14 to 19 are about information on a website for a community.

**14** The population of the community is 88 677

What is this to the nearest ten thousand?

- A 80 000
- B 88 000
- C 89 000
- D 90 000

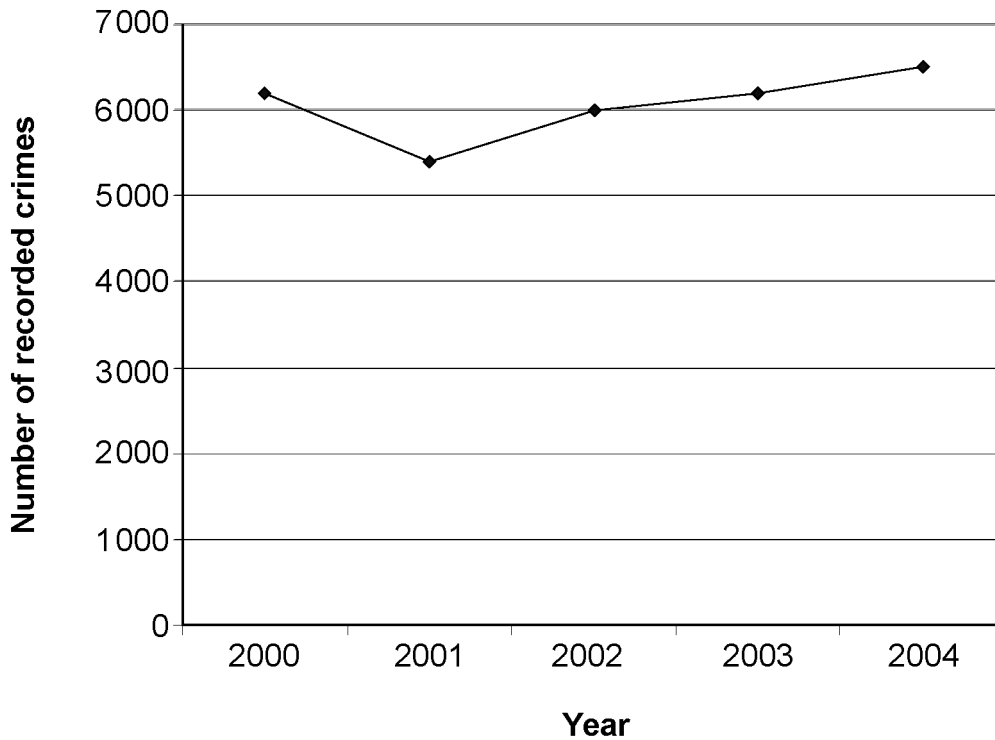
**15** Around two-thirds of minor crimes in the community are reported to the police.

As a percentage, two-thirds is closest to

- A 23%
- B 60%
- C 67%
- D 70%

**Please go on to the next page**

**16** The graph shows the trend in recorded crime in the community.



What is missing from the graph?

- A** a title
- B** a label on the horizontal axis
- C** a scale on the vertical axis
- D** a label on the vertical axis

**17** One year there are 6 513 recorded crimes in the community.  
24% of them are violent crimes.

Which calculation works out the number of violent crimes recorded in the community?

- A**  $6\,513 + 24 \div 100$
- B**  $6\,513 \div 24 \times 100$
- C**  $6\,513 \times 24 \div 100$
- D**  $6\,513 - 24 \times 100$

**18** There were two million eight hundred and fifty-five thousand recorded crimes in England that year.

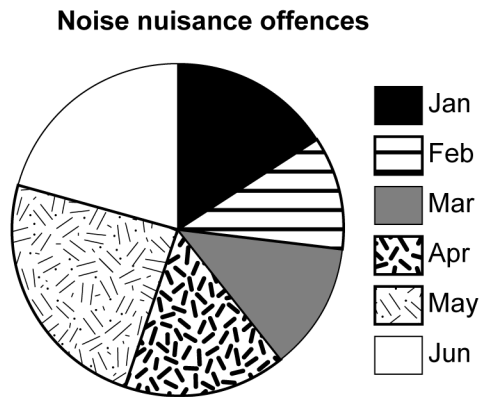
What is this number of crimes in figures?

- A** 285 500
- B** 2 855 000
- C** 28 055 000
- D** 28 550 000

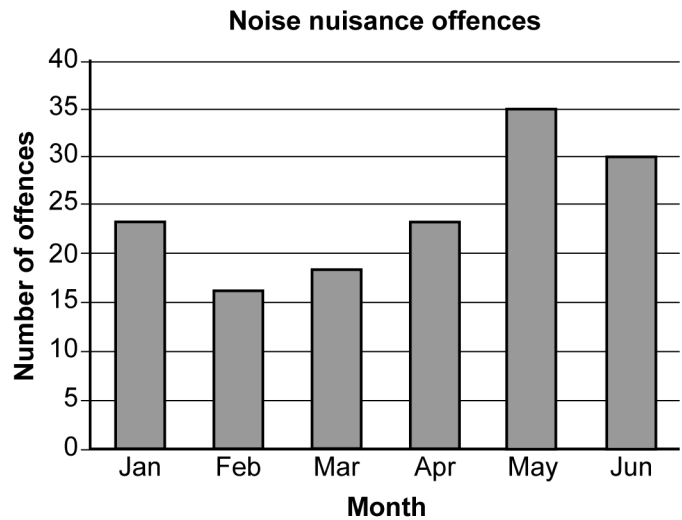
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19 These four displays show information about offences involving noise nuisance in the community.

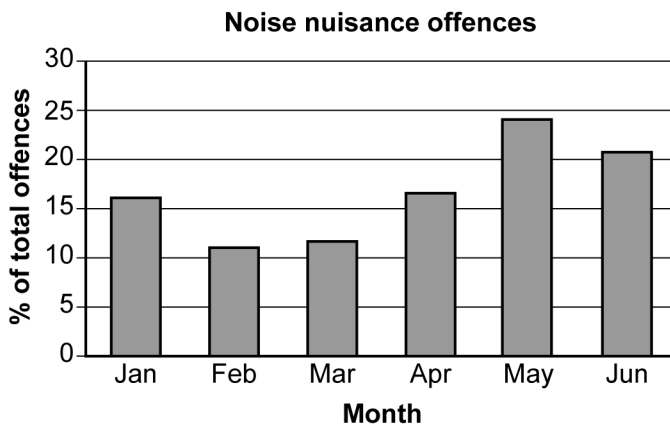
Display 1



Display 2



Display 3



Display 4

Noise nuisance offences						
Month	Jan	Feb	Mar	Apr	May	Jun
Number of offences	23	16	18	23	35	30

Which two displays show the **actual numbers** of offences?

- A Display 1 and Display 2
- B Display 1 and Display 3
- C Display 2 and Display 4
- D Display 3 and Display 4

Questions 20 to 27 are about a hairdresser's salon.

The table shows the numbers of clients at the hairdresser's in each of the last 6 months.

Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Total
470	650	550	400	470	700	3240

**20** The average (mean) number of clients per month at the hairdresser's over the last 6 months is

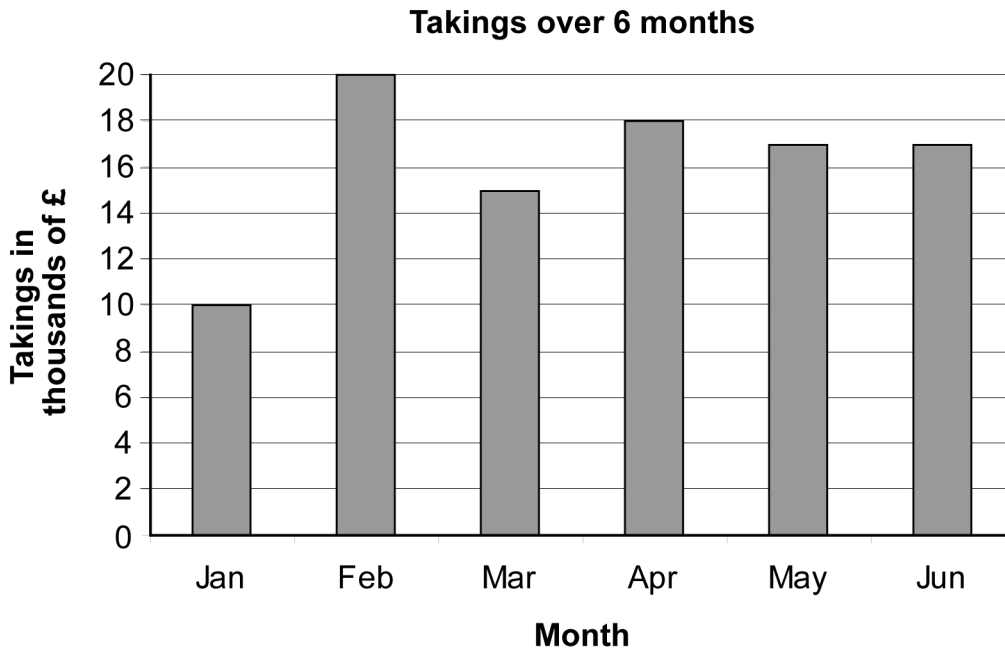
- A 400
- B 470
- C 510
- D 540

**21** The range of the numbers of clients at the hairdresser's over the last 6 months is

- A 700
- B 470
- C 300
- D 230

**Please go on to the next page**

- 22 This chart shows the amount of money received (takings) at the hairdresser's over 6 months.



How much **greater** were the takings in April than in January?

- A £8
- B £8 000
- C £10 000
- D £28 000

- 23 The price of a course of 10 nail treatments at the hairdresser's is £72  
There is a special offer discount of 20% when you pre-book 10 nail treatment appointments.

How much is 20% discount on £72?

- A £7.20
- B £14.40
- C £36.00
- D £52.00

- 24** The hairdresser's salon offers different treatments.  
The manager records how many clients have each treatment in one day.

This table shows the treatments he recorded

dry cut	highlights	dry cut	wash and blow dry	highlights	dry cut
dry cut	wash and blow dry	nail treatments	wash and blow dry	nail treatments	wash and blow dry
highlights	dry cut	highlights	nail treatments	dry cut	dry cut
wash and blow dry	wash and blow dry	nail treatments	highlights	highlights	highlights

The two treatments used most in this day are

- A** dry cut and highlights
  - B** dry cut and wash and blow dry
  - C** highlights and wash and blow dry
  - D** wash and blow dry and nail treatments
- 25** He also checks waiting times to see a stylist.  
25% of clients say the time they wait to see a stylist is too long.  
What is 25% as a fraction?

- A**  $\frac{2}{5}$
- B**  $\frac{1}{4}$
- C**  $\frac{1}{5}$
- D**  $\frac{1}{25}$

- 26** The manager sets a target for waiting times to see a stylist.  
The waiting times for nine-tenths of clients must be less than 5 minutes.  
One week there are 140 clients.

What is nine-tenths of 140?

- A** 14
- B** 50
- C** 90
- D** 126

- 27** Stylists are paid £8.75 an hour.  
In one week a stylist works 3 hours each day for 6 days.

Which calculation works out her pay for the week, in pounds?

- A**  $8.75 \times 3 \times 6$
- B**  $8.75 + 3 \times 6$
- C**  $8.75 \times 6 + 3$
- D**  $8.75 + 6 + 3$

**Please go on to the next page**

Questions 28 to 33 are about a patient in a hospital.

**28** A notice shows when the lights in a ward are turned on and off.

Ward lights turned on at	6:30am
Ward lights turned off at	10:45pm

How long are the ward lights on each day?

- A 4 hours 15 minutes
- B 7 hours 45 minutes
- C 16 hours 15 minutes
- D 17 hours 15 minutes

**29** A nurse records on a chart the amount of liquid the patient drinks.

The correct units for him to use are

- A kilobytes
- B centimetres
- C grams
- D millilitres

- 30** The patient must wear surgical stockings after his operation.  
The nurse uses this chart to choose the correct size.

<b>calf circumference</b>	<b>leg length</b>	<b>size</b>
less than 31cm	less than 41cm	S - REG
	41cm and above	S - LNG
31cm to 36cm	less than 43cm	M - REG
	43cm and above	M - LNG
36cm to 42cm	less than 46cm	L - REG
	46cm and above	L - LNG
42cm to 50cm	less than 46cm	XL - REG
	46cm and above	XL - LNG

The patient has a calf circumference of 31cm and a leg length of 43cm.

Which size does he need?

- A** S - LNG
- B** M - REG
- C** M - LNG
- D** XL - REG

- 31** A notice on the telephone shows the cost of calls.

Bedside telephone call charges 15p for each minute or part of a minute
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How much does a 7 minute 40 second call cost?

- A** £0.84
- B** £1.05
- C** £1.15
- D** £1.20

32 The patient buys these items from the hospital shop trolley.

Magazine	£1.30
Sweets	£1.25
Tissues	£0.54

He pays with a £10 note.

His change is

- A £7.91
- B £6.91
- C £6.10
- D £3.09

33 Visiting time begins at 2:30pm.  
The patient checks the time on the clock.



How long is it until visiting time begins?

- A 25 minutes
- B 45 minutes
- C 1 hour 25 minutes
- D 2 hours 5 minutes

**Please go on to the next page**

Questions 34 to 40 are about a business moving to a new building.

**34** Regulations state that each worker must have at least  $4\text{m}^2$  of floor space. One room has an area of  $84\text{m}^2$ .

According to these regulations, how many workers can work in the room?

- A 21
- B 42
- C 80
- D 88

**35** Another room is 7m long and 8m wide.

What is its area?

- A  $15\text{m}^2$
- B  $23\text{m}^2$
- C  $30\text{m}^2$
- D  $56\text{m}^2$

**36** A supervisor makes a scale drawing to show how furniture will fit into a room.

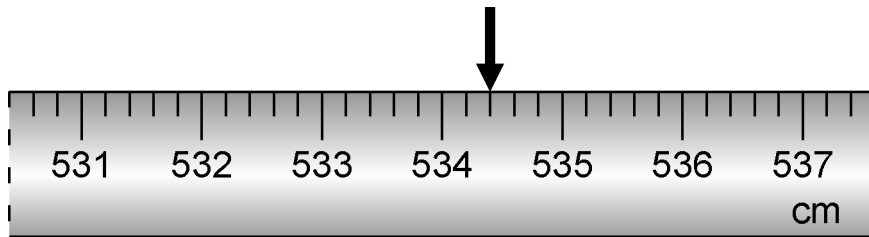
The scale of the plan is 1 : 20

Actual dimensions of a filing cabinet	
Height	127.5cm
Width	39cm
Depth	60cm

The **depth** of the filing cabinet on the scale drawing is

- A 3cm
- B 12cm
- C 20cm
- D 30cm

- 37** A worker uses a tape measure to check the width of a room for storing paper.  
The arrow points to the width.



The width is

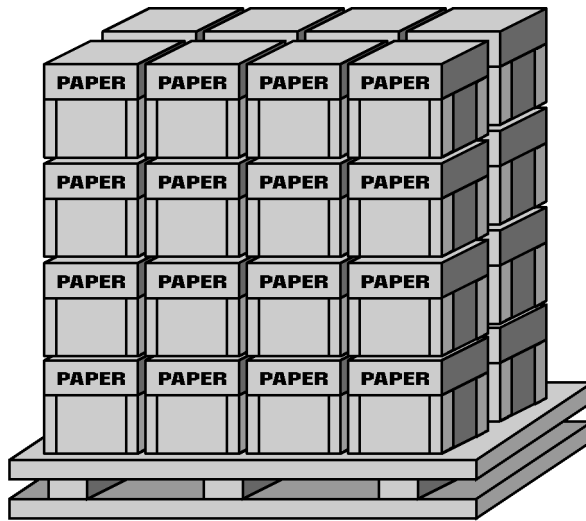
- A** 534.2cm
  - B** 534.4cm
  - C** 534.5cm
  - D** 534.7cm
- 38** He orders 350 boxes of paper costing £7.10 for each box.  
He calculates the total cost as £2 485

$$\text{£}7.10 \times 350 = \text{£}2\,485$$

Which of these calculations checks his total is correct?

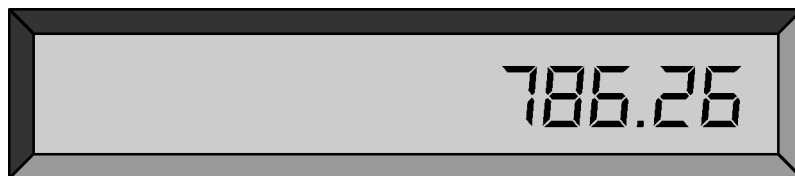
- A**  $2\,485 \div 350 = 7.10$
- B**  $2\,485 - 350 = 7.10$
- C**  $350 + 2\,485 = 7.10$
- D**  $350 \div 2\,485 = 7.10$

- 39 Boxes of paper are delivered to the new building on pallets. There are 4 layers of boxes on each pallet. Each layer has 2 rows of 4 boxes.



How many boxes are on each pallet?

- A 10
  - B 12
  - C 24
  - D 32
- 40 The supervisor orders new chairs for some of the workers. The calculator display shows the total cost in **pounds**.



How much is this to the nearest pound?

- A £780
- B £786
- C £787
- D £790

**End of test**

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