

**Key skills application of number
Adult numeracy
Level 2**

Practice Test Paper G

YOU NEED

- This test paper
- An answer sheet

You may NOT use a calculator

You may use a bilingual dictionary

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 AND 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 in the question paper, your answer sheet and all notes to the supervisor

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

Note for learners and tutors. This is a practice test that has been put together using questions similar to those that you would find in a "live" Key skills application of number or Adult numeracy test. The layout of the test is also the same as that used for a live test.

1. The table shows the number of people who enter a charity fun run one weekend.

Entries to fun run			
	Saturday	Sunday	Total
Number of adults	170	228	398
Number of children	86	90	176
Total number of runners	256	318	574

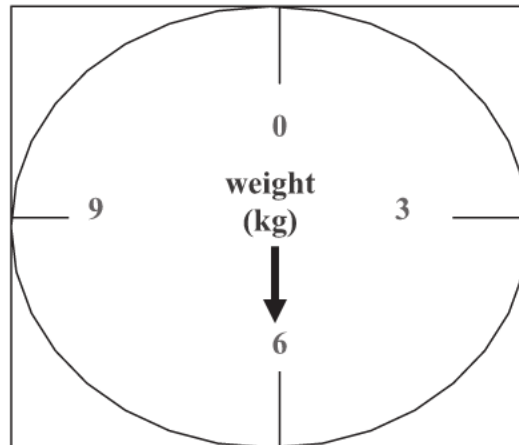
Entry to the fun run costs £3 for an adult and £1.50 for a child.

What is the total amount received from the entries for Saturday?

- A £596
- B £639
- C £819
- D £1 458

2. A woman wants to cook a fresh turkey. First, she weighs it (see diagram), then she uses the formula

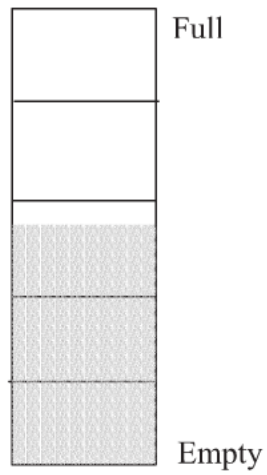
Cooking time: 35 minutes per kilogram plus a further 25 minutes.



What is the cooking time for the turkey to the nearest quarter of an hour?

- A $3\frac{3}{4}$ hours
- B 4 hours
- C $4\frac{1}{4}$ hours
- D 6 hours

3. The diagram shows a clear window on a rainwater butt. The butt holds 250 litres of rainwater when full.



Which of these is the best estimate of the amount of rainwater in the butt?

- A 125 litres
- B 140 litres
- C 150 litres
- D 160 litres

4. The table shows the number of spectators going to a Premiership football club each year over a 10-year period.

Year	Number of spectators (millions)
1994	1.21
1995	1.32
1996	1.42
1997	1.60
1998	1.85
1999	1.45
2000	1.70
2001	1.94
2002	2.03
2003	2.04

Which calculation works out the percentage increase in the number of spectators between the year 1994 and the year 2003?

A

$$\frac{1.21}{2.04} \times 100$$

B

$$\frac{2.04}{1.21} \times 100$$

C

$$\frac{(2.04 - 1.21)}{1.21} \times 100$$

D

$$\frac{(2.04 - 1.21)}{2.04} \times 100$$

5. This is the Mansfield - Nottingham, Nottingham - Mansfield bus timetable.

Mansfield – Nottingham Monday to Friday

Mansfield	06.35	07.15	07.31	07.44	08.09	09.10	09.41		17.14	17.47	18.19
Sutton Parkway	06.40	07.20	07.36	07.49	08.14	09.15	09.46		17.19	17.52	18.24
Kirkby in Ashfield	06.43	07.23	07.39	07.52	08.17	09.18	09.49		17.22	17.55	18.27
Newstead	06.48	-	07.43	07.57	08.22	09.23	09.54	then	17.27	18.00	18.32
Hucknall	06.52	-	07.47	08.01	08.26	09.27	09.58	these minutes	17.31	18.04	18.36
Bulwell	06.56	-	07.51	08.06	08.30	09.31	-	past each hour	17.35	-	18.40
Nottingham	07.04	07.50	08.01	08.14	08.42	09.43	10.13	until	17.44	18.16	18.48

Nottingham – Mansfield Monday to Friday

Nottingham	05.39	06.12	07.11	08.23	08.47	09.26	09.56		16.56	17.26
Bulwell	05.48	06.21	07.20	08.33	08.57	09.36	-		17.06	17.40
Hucknall	05.53	06.26	07.25	08.38	09.02	09.41	10.10	then	17.12	17.45
Newstead	05.59	06.31	07.30	08.43	09.07	-	10.15	these minutes	17.17	17.50
Kirkby in Ashfield	06.04	06.37	07.36	08.49	09.13	09.49	10.20	past each hour	17.23	17.55
Sutton Parkway	06.08	06.40	07.39	08.53	09.16	09.52	10.23	until	17.26	17.58
Mansfield	06.12	06.45	07.44	08.57	09.20	09.57	10.28		17.31	18.03

According to the timetable, how many buses leave Nottingham between 9:00am and midday?

- A 2
- B 4
- C 5
- D 6

6. The temperature in an ice-cream factory is 18°C .
The temperature in a freezer room is -20°C .

What is the temperature difference between the factory and the freezer room?

- A -0.9°C
- B -2°C
- C 2°C
- D 38°C

7. Last year an insurance policy cost £160.
After a large number of claims, the insurance company increases the price by 90% this year.

How much does the policy cost this year?

- A £144
- B £250
- C £304
- D £310

8. The cost of printing leaflets is made up of a fixed charge of £55 plus 4.5 pence per leaflet.

Which is a correct method of calculating the total cost of 500 leaflets, in pounds?

- A $(55 \times 500) + 45$
- B $(4.5 \times 500) + 55$
- C $\frac{(4.5 \times 500)}{100} + 55$
- D $\frac{(55 + 4.5)}{100} \times 500$

9. A man works out how much it will cost for tiles to cover a wall in a bathroom. The sketch shows the wall.

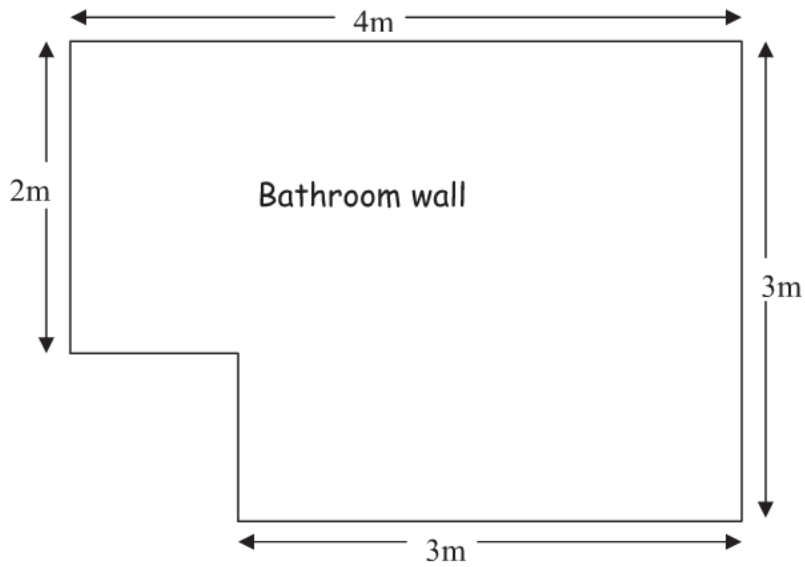


Diagram not to scale

The tiles measure 0.25m by 0.25m.
They cost £1 each.

How much will it cost to buy the tiles for this wall?

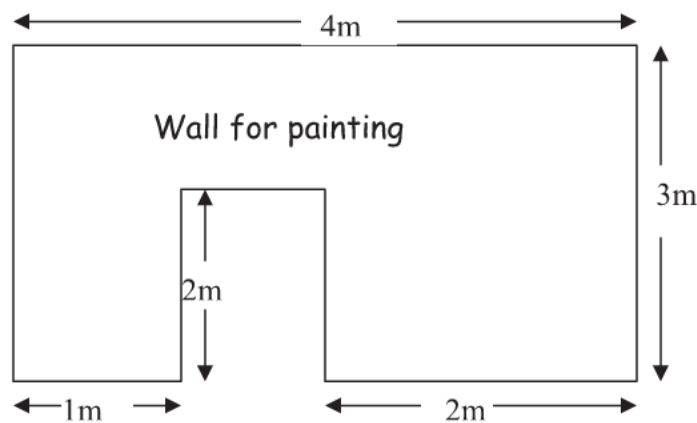
- A £44
- B £176
- C £192
- D £208

10. A tiler charges £6.95 per hour, plus a call-out charge of £39.95. She estimates that it will take her 4 hours, 45 minutes to complete the job.

Which of these is the closest check of the cost of her work?

- A $(7 \times 4) + 40$
- B $(7 + 40) \times 4$
- C $(7 + 40) \times 5$
- D $(7 \times 5) + 40$

11. A man works out how much paint he needs for a kitchen wall.



What is the area of the wall?

- A 10m^2
- B 11m^2
- C 13m^2
- D 18m^2

12. The table shows the highest and lowest recorded temperatures in five towns in Spain.

City	Lowest recorded temperature (°C)	Highest recorded temperature (°C)
Madrid	-15	42
Barcelona	-10	38
Seville	-5	50
Bilbao	-9	42
Ibiza	-1	37
Melilla	-4	39

What is the median of the highest recorded temperatures?

- A 40.5°C
- B 42°C
- C 46°C
- D 50°C

13. The table shows the highest and lowest recorded temperatures in five towns in Spain.

City	Lowest recorded temperature (°C)	Highest recorded temperature (°C)
Madrid	-15	42
Barcelona	-10	38
Seville	-5	50
Bilbao	-9	42
Ibiza	-1	37
Melilla	-4	39

What is the range of the lowest recorded temperatures?

- A -15°C
- B -1°C
- C 11°C
- D 14°C

Questions 14 and 15 are based on the information below from a holiday brochure.

14. A holiday brochure shows these prices for holidays to three hotels.

Holiday prices					(£ per person)	
Hotel	Venus		Beach		Gardenia	
Number of days	7	10	7	14	7	14
Day of departure	Thurs	Sun	Fri	Mon	Sat	Wed
30 May – 15 Jun	395	495	429	675	470	710
16 Jun – 29 Jun	405	505	439	685	490	720
30 Jun – 11 Jul	415	515	449	695	510	730
12 Jul – 1 Aug	425	545	459	705	540	740
2 Aug – 15 Aug	445	565	480	720	560	760
16 Aug – 28 Aug	480	580	500	740	580	780
29 Aug – 11 Sep	460	565	450	770	490	740
12 Sep – 31 Sep	425	525	439	685	480	720

June Calendar					
Sun	--	5	12	19	26
Mon	--	6	13	20	27
Tues	--	7	14	21	28
Wed	1	8	15	22	29
Thurs	2	9	16	23	30
Fri	3	10	17	24	--
Sat	4	11	18	25	--

What is the earliest date a holidaymaker can depart for a 7-day holiday to the Gardenia hotel in June?

- A 1st June
- B 2nd June
- C 3rd June
- D 4th June

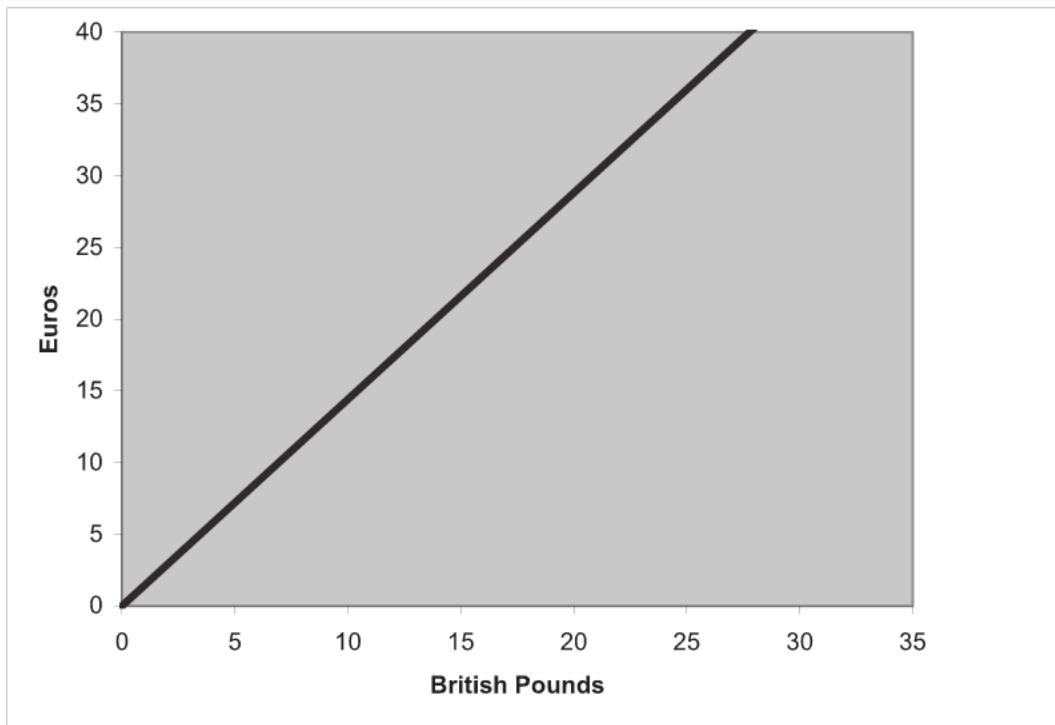
15. A man and a woman want to take a week's holiday at the *Gardenia* hotel during the summer.

Holiday prices					(£ per person)	
Hotel	Venus		Beach		Gardenia	
Number of days	7	10	7	14	7	14
Day of departure	Thurs	Sun	Fri	Mon	Sat	Wed
30 May – 15 Jun	395	495	429	675	470	710
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30 Jun – 11 Jul	415	515	449	695	510	730
12 Jul – 1 Aug	425	545	459	705	540	740
2 Aug – 15 Aug	445	565	480	720	560	760
16 Aug – 28 Aug	480	580	500	740	580	780
29 Aug – 11 Sep	460	565	450	770	490	740
12 Sep – 31 Sep	425	525	439	685	480	720

How much will they save in total by picking the cheapest time to go rather than the most expensive time?

- A £110
- B £220
- C £470
- D £940

16. A holiday-maker checks this graph to convert money between pounds and euros.



To the nearest euro, how many euros are equivalent to £25?

- A 17 euros
- B 36 euros
- C 38 euros
- D 40 euros

17. The distance between Valencia and Benidorm is 78 miles.

1 mile is equivalent to 1.6 kilometres

What is the distance between Valencia and Benidorm to the nearest kilometre?

- A 49km
- B 112km
- C 125km
- D 138km

18. The distance from Valencia to Benidorm is 78 miles.
A car takes 1 hour 30 minutes to make the journey.

$$\text{Average speed} = \frac{\text{distance}}{\text{time}}$$

What is the average speed of the car in miles per hour?

- A 26 mph
- B 39 mph
- C 52 mph
- D 117 mph

19. On a map the distance from Benidorm to Almansa measures 6.7cm.
The scale of the map is 1cm : 20km.

The actual distance from Benidorm to Almansa is

- A 100.34km
- B 103.4km
- C 130.4km
- D 134km

20. To change from Celsius ($^{\circ}\text{C}$) to Fahrenheit ($^{\circ}\text{F}$) use the formula:

$$F = \frac{9C}{5} + 32$$

The temperature on one day was 24.5°C .

What was the temperature in Fahrenheit, to the nearest degree?

- A 75°F
- B 76°F
- C 77°F
- D 81°F

21. A chain of garages sells 2478 cars one year. 1980 of these are new cars.

Which of these is the closest estimate of the ratio of new cars to used cars?

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

22. A chain of garages sells 1980 new cars in one year.
493 of these are diesel cars.

Approximately, what percentage of the cars they sell are diesel cars?

- A 5%
- B 25%
- C 33%
- D 40%

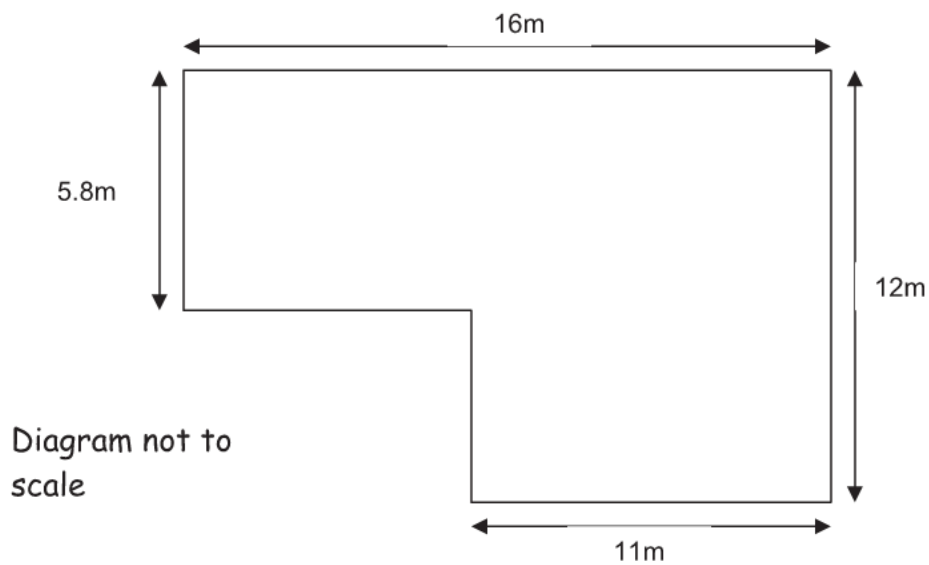
23. A brochure shows the prices of different styles of wheels for one of the cars.

Wheel type	a	b	c	d	e
Price (£)	150	175	200	250	200

What is the range of these prices?

- A £50
- B £100
- C £150
- D £250

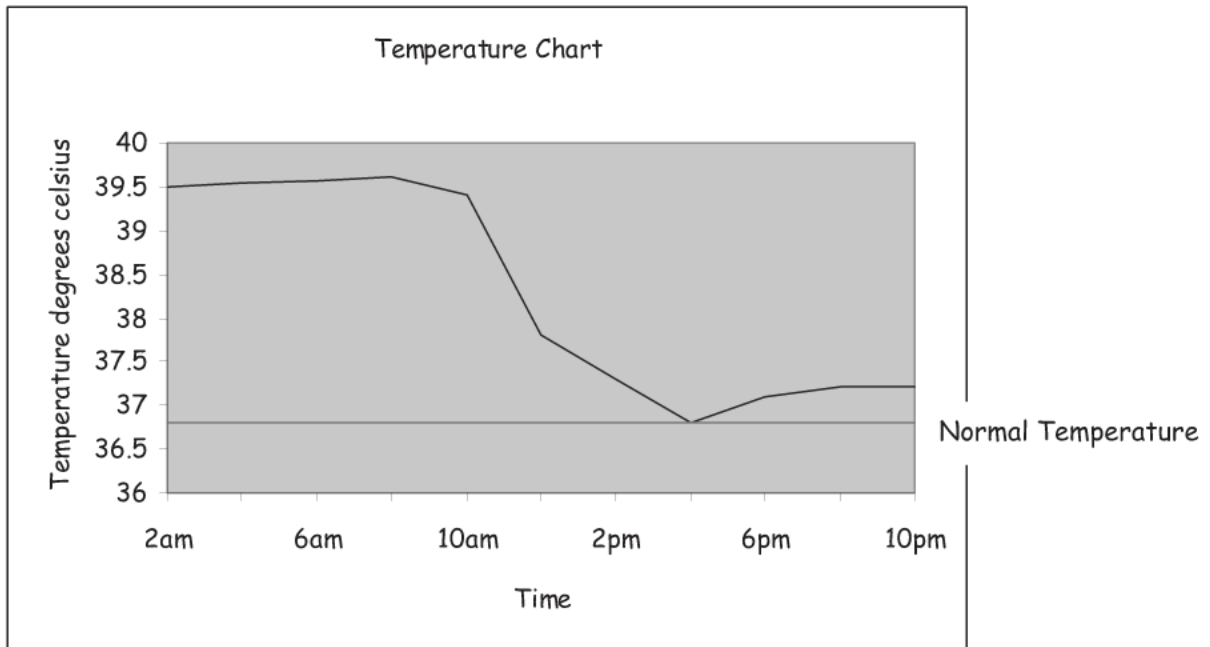
24. The plan shows the floor of a car showroom.



What is its area, to the nearest square metre?

- A 151m^2
- B 155m^2
- C 156m^2
- D 161m^2

25. The chart shows the temperature of a patient admitted to hospital.



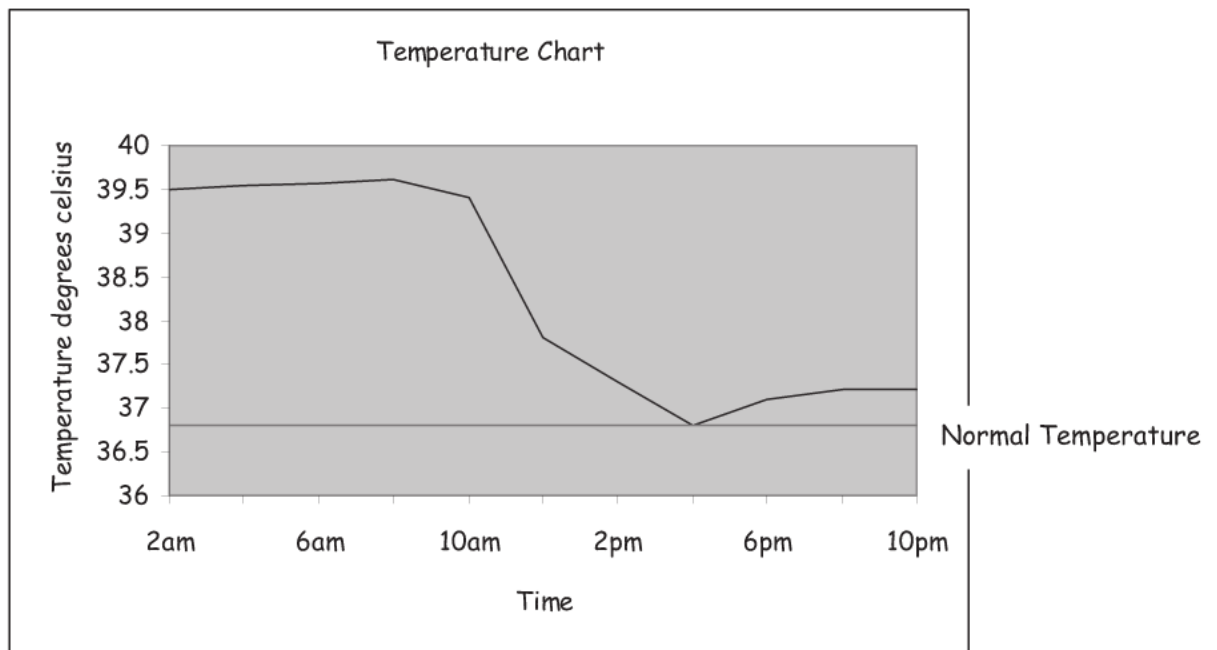
What was the patient's temperature at 10am?

- A 37.2°C
- B 39.4°C
- C 39.6°C
- D 39.7°C

26. How long after the patient was admitted at 2am did it take for his temperature to first reach normal temperature?

- A 7 hours
- B 10 hours
- C 14 hours
- D 20 hours

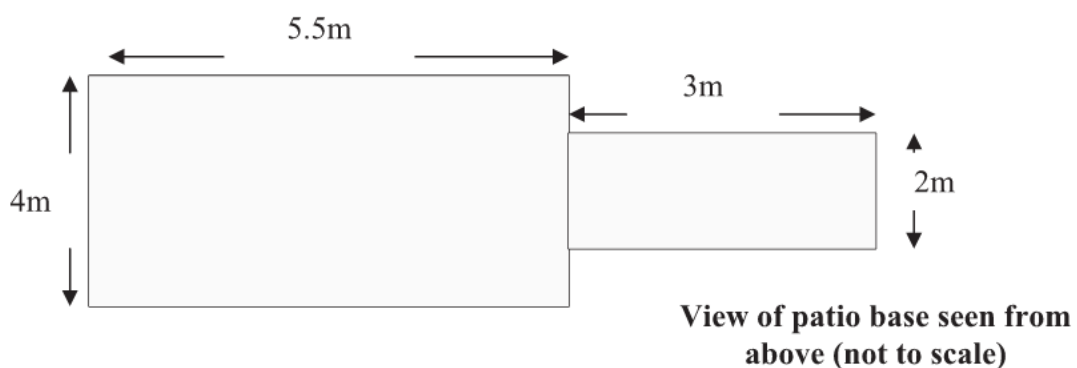
27. What is the range of the patient's temperature to the nearest 0.1°C over the time period shown on the chart?



- A 2.4°C
- B 2.5°C
- C 2.8°C
- D 3.0°C

28. A builder charges $\pounds 15$ per square metre for laying concrete.

How much does the builder charge for laying this patio base?



- A $\pounds 28$
- B $\pounds 210$
- C $\pounds 280$
- D $\pounds 420$

29.A builder uses these instructions for making concrete.

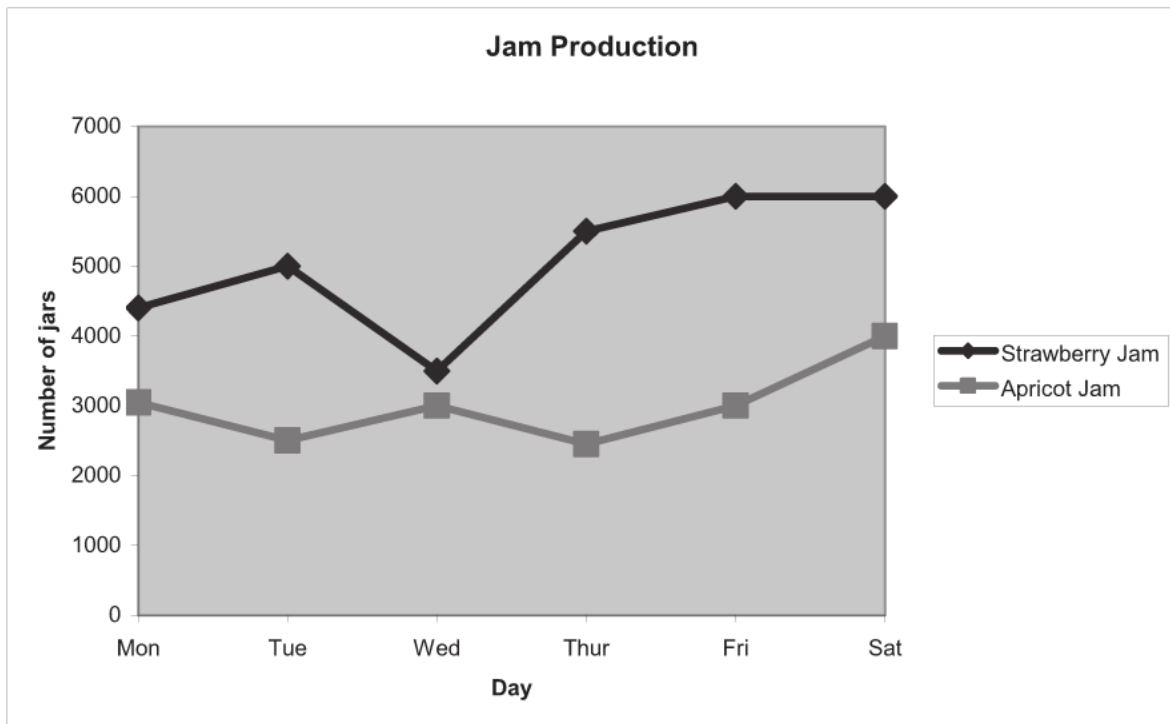
Mix aggregate and cement in the ratio of 9 : 2

He uses an electric mixer, which has a capacity of 55 shovels.

How many shovels of cement does he need to fill the mixer with the correct mix?

- A 5
- B 10
- C 22
- D 45

30.A factory makes jam. The graph shows the number of jars of strawberry and apricot jam they made one week.



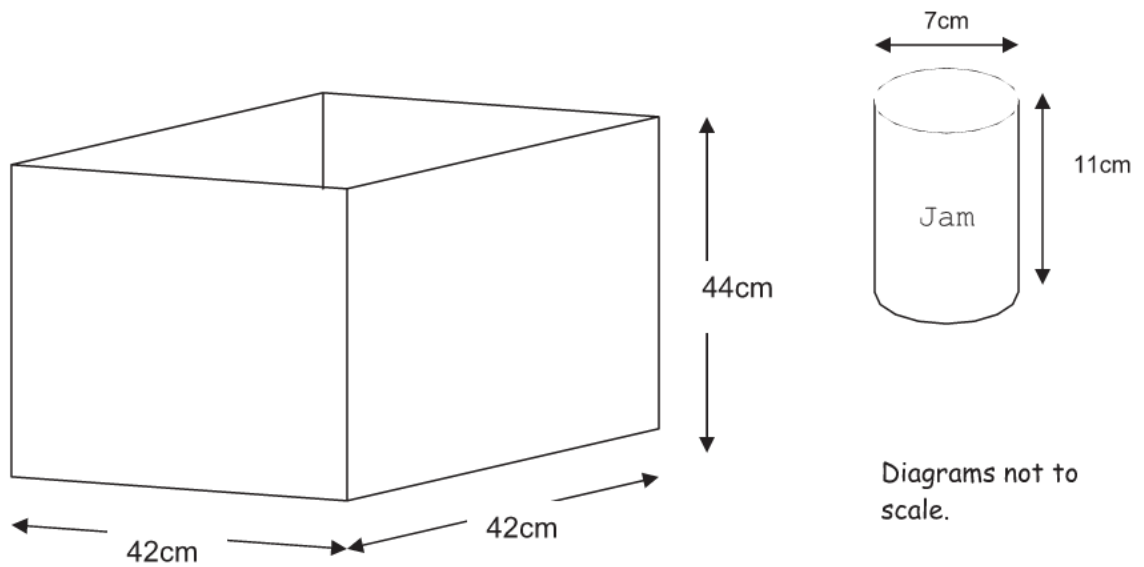
What was the total number of jars of strawberry and apricot jam produced on Thursday, to the nearest 500 jars?

- A 6 000
- B 7 500
- C 8 000
- D 8 500

31. Workers pack jars of jam into cases.

The jars are 7 centimetres in diameter and 11 centimetres high.

The diagram shows a packing case and a jar.



What is the maximum number of jars that fit in the packing case?

- A 100
- B 144
- C 168
- D 196

32. The table shows the hours one worker does one week.

Day	Monday	Tuesday	Wednesday	Thursday	Friday
Hours worked	9	8	7	7	7

The worker is paid £7.50 an hour and £3 a day bonus.

Which calculation gives his total pay (including bonuses) for the week?

- A $(5 \times £7.50) + (5 \times £3)$
- B $(38 \times £7.50) + £3$
- C $(£7.50 + £3) \times 38$
- D $(38 \times £7.50) + (5 \times £3)$

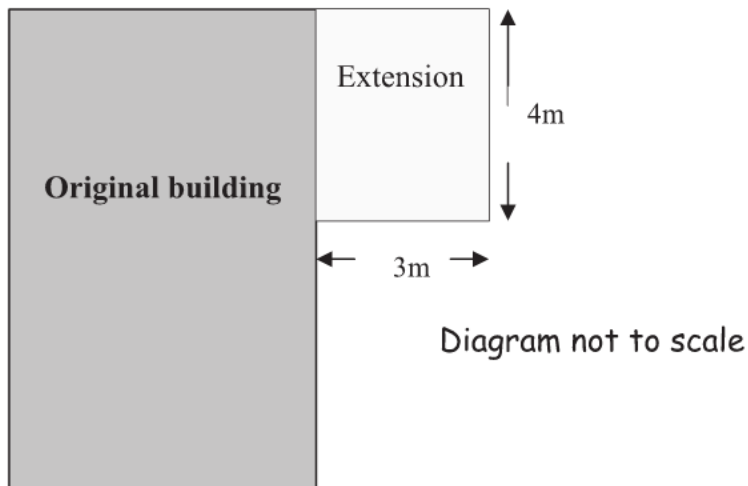
33. There are 110 calories in an ounce of low sugar jam.

1 ounce = 30 grams

How many calories are there in 100 grams of low sugar jam?

- A about 210 calories
- B about 240 calories
- C about 330 calories
- D about 370 calories

34. A homeowner asks a builder to provide an estimate of the cost of a single storey extension as shown in the diagram. The builder says that a guide cost would be £600 per square metre.



What is the estimated cost of the extension?

- A £1800
 - B £2400
 - C £4200
 - D £7200
35. The drawings for a house extension are to a scale of 1:50
The patio doors are 1.8 metres wide.

How wide should the patio doors be on the drawing?

- A 9mm
- B 36mm
- C 9cm
- D 36cm

36. A builder makes a concrete mix for an extension. He uses 2 litres of water for every 25 kilograms of dry concrete materials.

To the nearest litre, how much water does the builder use for 140 kilograms of dry concrete materials?

- A 11 litres
- B 12 litres
- C 13 litres
- D 14 litres

37. This table shows the profits of two sites of a company over a 5-year period.

A manager puts the information from the table into charts to compare the profits of the two sites.

Company profits at Norwich and Cardiff sites					
Year	1	2	3	4	5
Profit at Norwich (£)	2010	3450	4200	5970	7250
Profit at Cardiff (£)	-4800	-3580	1005	8000	14190

Chart 1

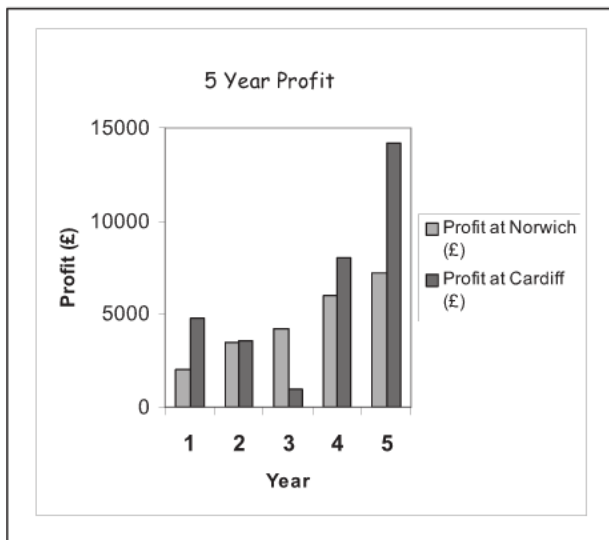


Chart 2

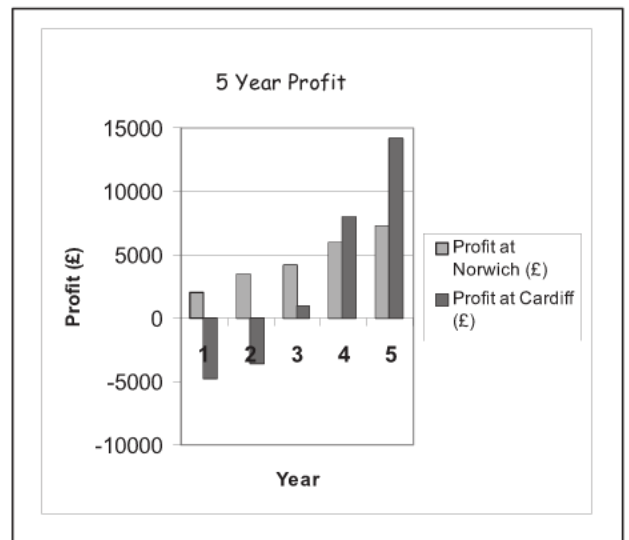


Chart 3

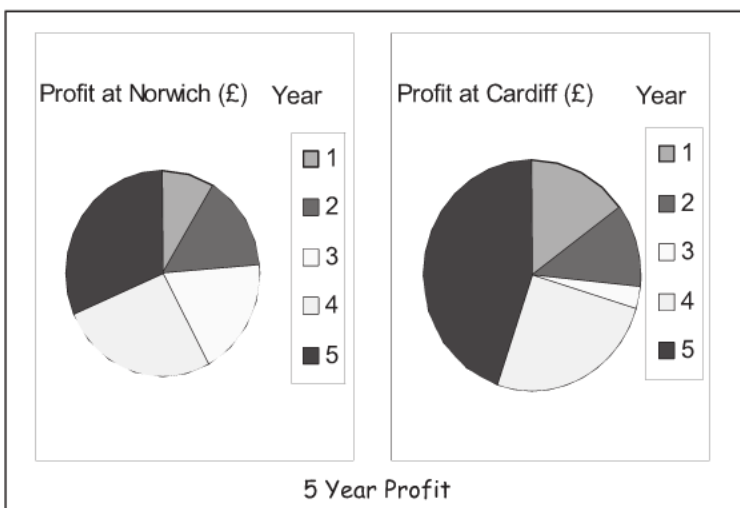
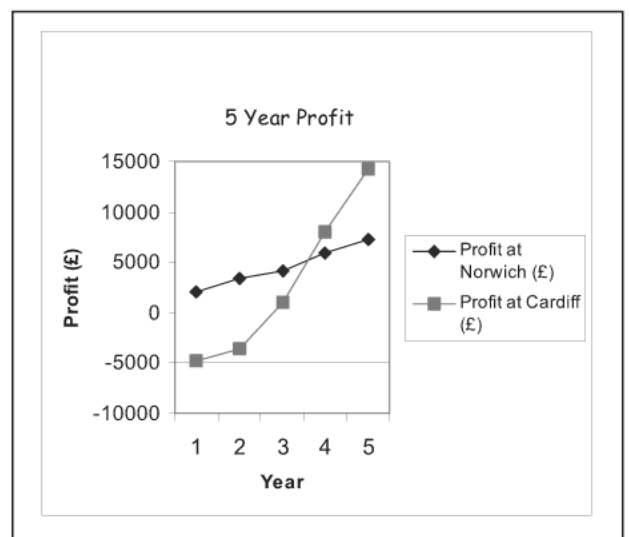


Chart 4



Which of the charts are accurate ways to represent the information?

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

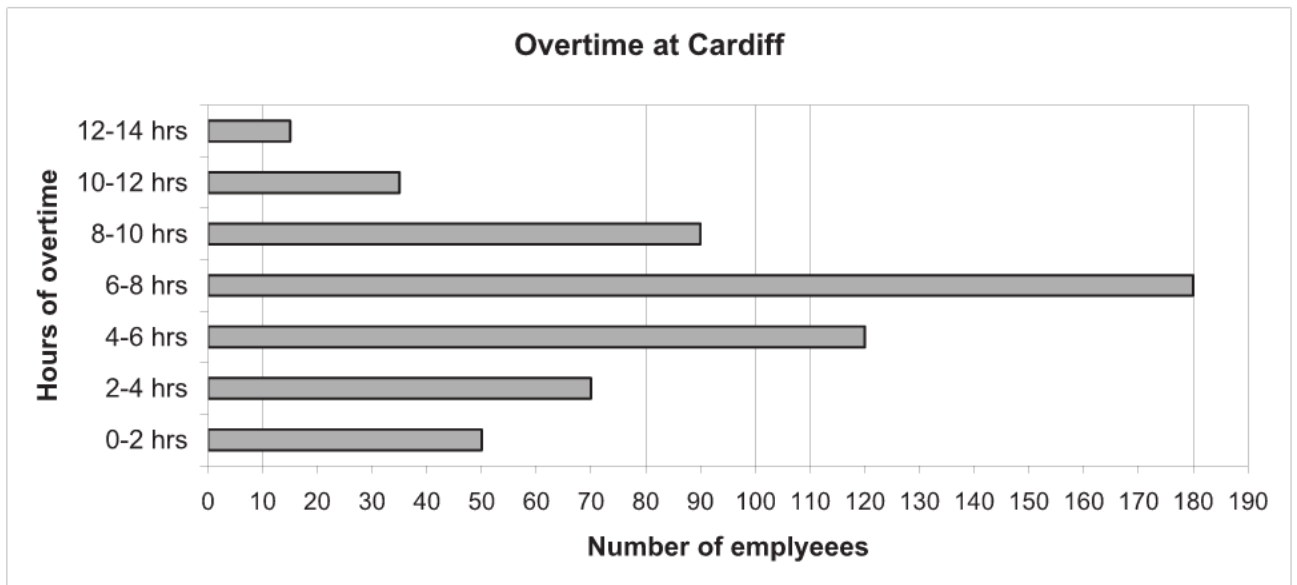
38. The Norwich site of a company has 471 employees.

94 of these are under 18.

Approximately what fraction of the employees are under 18?

- A about $\frac{1}{6}$
- B about $\frac{1}{5}$
- C about $\frac{1}{4}$
- D about $\frac{1}{3}$

39. The chart shows the distribution of hours overtime worked by the Cardiff employees of a company in one week.



How many employees worked **at least 6** hours overtime?

- A 140
- B 180
- C 240
- D 320

40. The table shows information about the weekly pay of employees at the Cardiff site of a company.

Weekly pay of employees - Cardiff	
Pay	Number of employees
Less than £200	190
£200 - £399	256
£400 - £599	55
£600 or more	59

Approximately what percentage of the employees are paid £400 or more?

- A 25%
- B 20%
- C 15%
- D 10%

End of test