

Section A

1. Work out $1449 \div 23$.

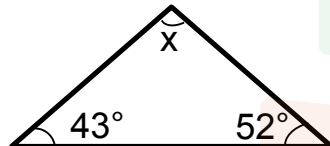
A	65	B	63	C	71	D	76	E	69
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2. Which of the following numbers has the largest value?

0.6 0.0061 0.601 0.061 0.6001

A	0.6	B	0.061	C	0.6001	D	0.601	E	0.0061
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3. Calculate the angle marked with the letter x.



A	70°	B	85°	C	90°	D	75°	E	60°
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4. What is 0.78 as a percentage?

A	7.8%	B	78%	C	0.78%	D	780%	E	0.078%
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5. The number of letters in the word PASTE that have line symmetry is

A	5	B	4	C	3	D	2	E	1
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6. Eleven pencils cost £4.95. How much would seven pencils cost?

A	£3.50	B	£3.20	C	£4.00	D	£3.15	E	£4.15
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7. Here is a list of numbers.
5, 8, 9, 11, 12, 13, 17, 18, 20

7. (a) Which numbers in the list are factors of 40?

A	12,13,18	B	17,18	C	12,13,17	D	9,11,12	E	5,8,20
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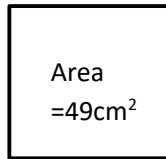
7. (b) How many of the numbers in the list are multiples of 3?

A	0	B	1	C	2	D	3	E	4
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8. Change 45% to a fraction in its simplest form.

A	$\frac{19}{25}$	B	$\frac{35}{50}$	C	$\frac{75}{100}$	D	$\frac{9}{20}$	E	$\frac{1}{4}$
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9. Find the perimeter of this square.



A	49cm	B	98cm	C	28cm	D	20cm	E	14cm
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10. Find the value of $89.1 - 36.55$

A	52.45	B	53.55	C	53.45	D	52.65	E	52.55
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11. How many seconds are there in a day?

A	3600	B	1400	C	1440	D	51,840	E	86,400
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12. Find n if $126 \div n = 9$

A	14	B	16	C	17	D	11	E	13
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13. Simplify the expression $4c - 6d + 2c + 3d$.

A	$6c - 3d$	B	$15cd$	C	$2c + 9d$	D	$7c + 8d$	E	$6c - 9d$
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14. A bag contains 12 red, 17 blue, 10 orange and 21 black counters. You pick a counter without looking inside.

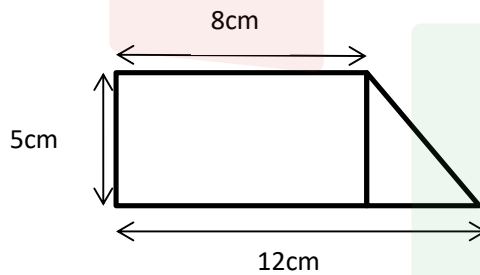
a) What is the probability that you select a red counter?

A	$\frac{1}{3}$	B	$\frac{1}{6}$	C	$\frac{5}{6}$	D	$\frac{1}{5}$	E	$\frac{4}{5}$
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14. b) What is the probability that it is not an orange counter?

A	$\frac{1}{3}$	B	$\frac{1}{6}$	C	$\frac{5}{6}$	D	$\frac{4}{5}$	E	$\frac{1}{5}$
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15. Calculate the area of the trapezium.



A	50cm^2	B	44cm^2	C	40cm^2	D	42cm^2	E	48cm^2
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16. Convert 5300grams to kilograms.

A	0.053kg	B	0.53kg	C	530kg	D	5.3kg	E	53kg
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17. 243, -81, 27, -9,,

What are the next two numbers in the sequence?

A	6, -1	B	-3, 1	C	3, -1	D	6, -3	E	-2, 1
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18. I left home for school at 7.22am and arrived at 8.16am. How long did it take me to get to school?

A	58mins	B	1 hour and 4 mins	C	1 hour and 6 mins	D	38mins	E	54mins
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19. The heights, in metres, of eleven children are

1.32, 1.47, 1.43, 1.32, 1.35, 1.46, 1.49, 1.32, 1.37, 1.49, 1.48

19. a) What is the mode height?

A	1.49	B	1.32	C	1.46	D	1.47	E	1.35
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19. b) What is the median height?

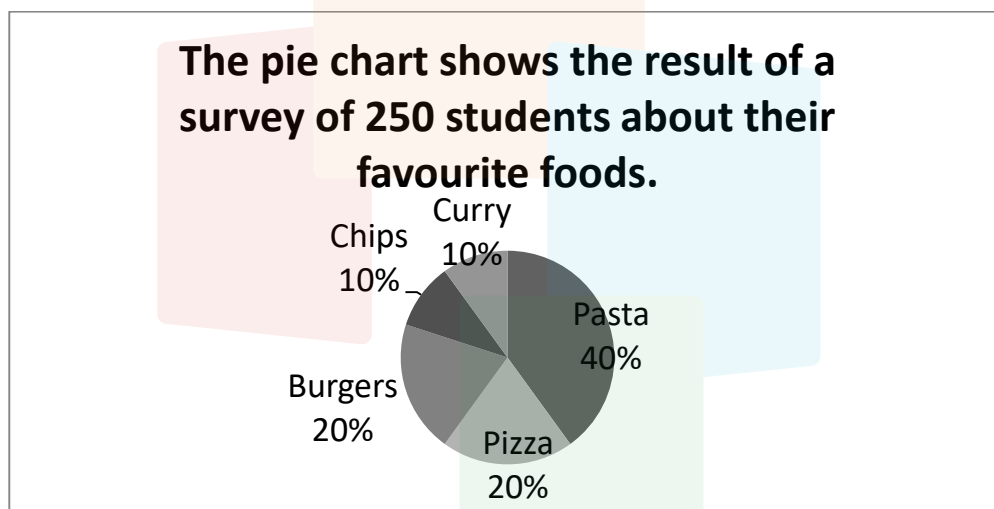
A	1.49	B	1.44	C	1.43	D	1.46	E	1.35
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20. What is the value of

$$1^2 \times 2^2 \times 3^2 \times 4^2$$

A	36	B	100	C	72	D	576	E	10
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21.



21. (a) How many students chose chips?

A	25	B	16	C	15	D	26	E	40
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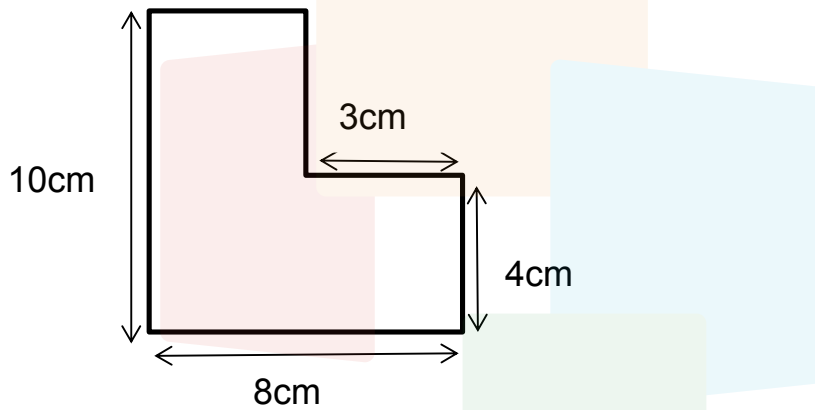
21. (b) What angle of the pie chart is represented by pizza?

A	10°	B	36°	C	72°	D	20°	E	30°
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22. A roll of wallpaper is 10m long and 0.6m wide. How many rolls of wallpaper are needed to cover a wall 3m high and 8m wide?

A	5	B	4	C	7	D	10	E	11
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23. Find the perimeter of the compound shape.



A	92cm	B	52cm	C	36cm	D	25cm	E	30cm
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24. $0.6 \times 7.12 =$

A	4.272	B	42.2	C	0.472	D	21.6	E	2.16
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25. $P = 9a - 7b^2$

Work out the value of P when $a = 3$ and $b = -2$

A	14	B	-169	C	3	D	55	E	-1
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26. $\frac{3}{4} + 0.35$

A	$\frac{6}{5}$	B	$\frac{11}{10}$	C	$\frac{65}{4}$	D	$\frac{1}{10}$	E	$\frac{4}{5}$
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27. It takes 5 teachers 9 hours to mark a set of examination papers. How long would it take for 12 teachers to mark the same set of examination papers?

A	3.75 hours	B	3.5 hours	C	21.6 hours	D	20.5 hours	E	4 hours
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28. The mean of Jane's six Mathematics test is 89%. After her seventh test the mean increased to 90%. What did Jane score in her seventh test?

A	95%	B	89%	C	96%	D	90%	E	93%
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End of Section A

Section B

Circle the Correct Answer

1. There are 4 red counters and 3 black counters in bag A. There are 4 red counters and 5 black counters in bag B. Pam picks a counter from bag A and places it in bag^B. She does not know what colour counter she picked from bag A. She then picks a counter from bag B. Which of the following could be the probability of Pam picking a red counter from bag B.

A	$\frac{1}{2}$	B	$\frac{3}{5}$	C	$\frac{9}{10}$	D	$\frac{3}{10}$	E	$\frac{4}{5}$
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2. Two angles of a quadrilateral are 95° and 75° . Which of the following could be the difference of the other two angles?

A. 190	B. 180	C. 195	D. 200	E. 205
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3. The first two terms of a sequence are 1, 2. Each term after is the sum of all the previous terms in the sequence. Which of these is not part of the sequence?

A. 3	B. 6	C. 24	D. 50	E. 96
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4. What is the difference between the smallest 3-digit number and the largest 4-digit number?

A. 1	B. 900	C. 1001	D. 9998	E. 9899
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5. Sixteen people, and no more, can sit evenly spaced around a large square table. Jas arranges six of these square tables in a row to make one long rectangular table. What is the maximum number of people that can sit evenly spaced around this long table?

A. 46	B. 76	C. 56	D. 96	E. 86
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6. A square piece of card has perimeter 28 cm. Ann cuts the card into two rectangles. The perimeter of one of the rectangles is 16 cm. What is the perimeter of the other rectangle?

A. 26	B. 16	C. 14	D. 24	E. 20
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7. The diagrams below show three different views of the same cube. Which letter is on the face opposite M?



A. I	B. P	C. K	D. U	E. O
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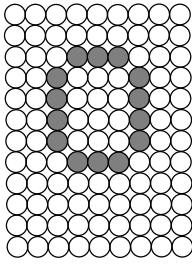
8. Jan counted a total of 100 cars parked in four rows of a departmental store car park. Five minutes later, 10 cars had driven away from the first row, 8 cars had driven away from the second row, 6 cars had driven away from the third row and 4 cars had driven away from the fourth row. She noticed that there was now the same number of cars in each row. How many cars were originally parked in the third row?

A. 24	B. 19	C. 25	D. 18	E. 23
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9. A small ink cartridge has enough ink to print 400 pages. Three small cartridges can print as many pages as two medium cartridges. Three medium cartridges can print as many pages as two large cartridges. How many pages can be printed using a large cartridge?

A. 600	B. 900	C. 1200	D. 1800	E. 2400
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10.



A train display shows letters by lighting cells in a grid, such as the letter 'o' shown. A letter is made **bold** by also lighting any unlit cell immediately to the right of one in the normal letter. How many cells are lit in a **bold** 'o'?

A. 22	B. 24	C. 26	D. 28	E. 30
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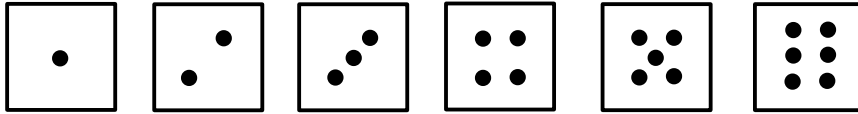
11. Khris Krige gives each of his helper's one twelfth of a giant chocolate bar that he had. One third of the bar was left. How many helpers did he have?

A. 6	B. 8	C. 12	D. 15	E. 18
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12. The Crystal Palace bridge has carried 300 million cars since it was opened in 1964. On average, roughly how many vehicles is this per month?

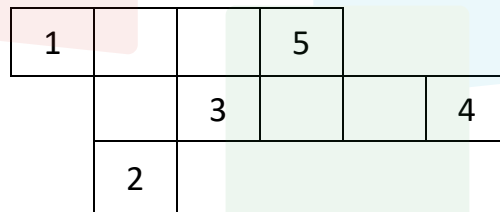
A. 50 000	B. 500 000	C. 5 000 000	D. 6 000 000	E. 60 000 000
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13. How many of the six faces of a dice (shown below) have fewer than three lines of symmetry?



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| A. 2 | B. 3 | C. 4 | D. 5 | E. 6 |
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14. In the diagram shown below, which square could be removed with the perimeter of the shape remaining the same?



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|------|------|------|------|-------------|
| A. 1 | B. 2 | C. 3 | D. 4 | E. 5 |
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15. Two numbers X and Y (where Y is bigger than X), have a Highest Common Factor of X. What is the Lowest Common Multiple of X and Y?

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|-------------|----------|----------|-------|-------|
| A. Y | B. X^2 | C. Y^2 | D. 2Y | E. XY |
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End of Section B

