

1) What is the next number in this sequence?

7 10 17 27 44 71 ?

A	7
B	44
C	81
D	115

2) There are four dozen coins in a jar.

If five children each remove seven coins from the jar, how many coins are left?

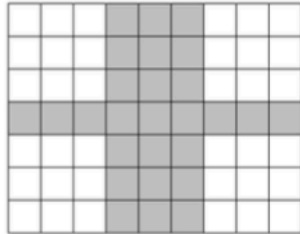
3) A taxi charges E pounds for the first mile of a journey and then U pence for each additional mile.

Write an expression, in terms of E and U , to show how much a 6-mile journey would cost in pence.

4) If X is an odd number, which of the following must also be an odd number?

A	$X + 1$
B	$X - 5$
C	$3X$
D	$5X + 3$

5) This flat rectangle measures 18 cm by 14 cm.
The unshaded corners are cut out and it is then folded to make a small open box.
What is the volume of this box?



6) What is the range of these numbers?

76.892 32.928 12.988 38.918 82.183

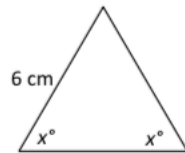
- 7) 15 people attended Claire's birthday party.
On average they ate $1\frac{3}{5}$ pizzas each.
How many pizzas were eaten in total?

- 8) For which of the following can you calculate the exact probability?

A	It will rain next month.
B	Sam will go on holiday next year.
C	Ben will eat vegetables next week.
D	Tom will score a 3 when he rolls a fair die.

- 9) When 19 is divided by the integer G , the remainder is 4.
How many different values of G are possible?

10)



$$x = 60^\circ$$

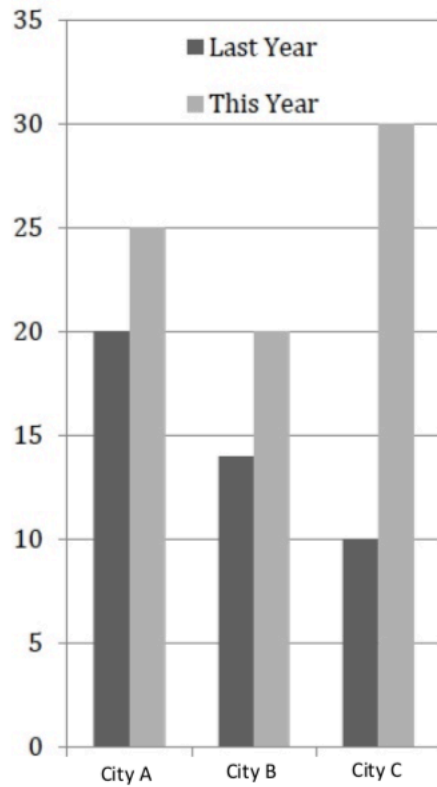
Calculate the perimeter of the triangle.

- 11) Tim brought 180 cookies to a meeting.
By the end of the meeting, 72 cookies were eaten.
What percentage of cookies were uneaten?

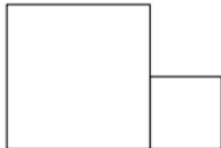
- 12) Which of the following is closest to 0.32×89 ?

A	$\frac{1}{2}$ of 50
B	$\frac{1}{3}$ of 90
C	$\frac{2}{5}$ of 60
D	$\frac{3}{8}$ of 30

- 13) The chart below shows the number of road accidents that took place in three cities. What was the average number of road accidents this year?



- 14) This figure consists of two squares. One square has a side length of 4 cm and the other has a side length of 9 cm. What is the perimeter of the figure?

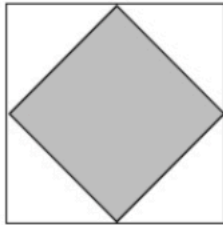


15) If H is a positive integer, which of the following expressions has the largest value?

A	$-H$
B	$H - 7$
C	$-H + 7$
D	$H + 6$

16) In this figure, four line segments are drawn between the midpoints of the sides of a large square to make a smaller shaded square.

If the area of the large square is y , what is the area of the small square?



A	$2y$
B	$y/2$
C	y
D	$y/4$

17) $3,829 - 2,342.48 =$

- 18) Bob thinks of an integer that is greater than 0 and less than 30.
What is the probability that Bob's integer is both a square number and a cube number?

- 19) What is the lowest common multiple of 3 and 12?

- 20) The area of the circle is 90% of the area of the pentagon.
If the area of the pentagon is V , what is the area of the circle in terms of V ?

