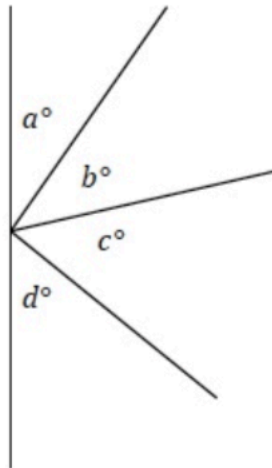


- 1) $a^\circ = 42$ $b^\circ = 31$ $d^\circ = 29$
What is the value of c° ?



- 2) Francis has 90 sweets. He divides them equally into piles.
Which of the following could not be the number of piles?

A	16
B	15
C	45
D	30

- 3) Figure 1 consists of a square and an equilateral triangle.
The perimeter of the triangle is 18 cm and the perimeter of the square is 36 cm.
What is the perimeter of Figure 1?

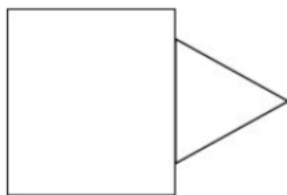


Figure 1

4) $0.0032 \times 10,000 =$

5) Calculate the median of the following set of numbers:

345 542 829 734 973 123 349 444

6) $3x + 19 = 7x - 5$
What is the value of x ?

- 7) Set F contains all odd numbers.
Set R contains all prime numbers.
Set U contains all numbers less than 5.
Which number is in all three sets?

A	1
B	-6
C	3
D	4

- 8) What is the remainder when 5,430 is divided by 130?

- 9) $0.75 + \frac{5}{6} =$
Write your answer as a mixed number.

- 10) $N/2 = 13$
 $N/4 =$

A	6.5
B	26
C	52
D	13

- 11) Figure T consists of two congruent regular pentagons, A and B.
The perimeter of Figure T is 96 cm.
If pentagons A and B are separated, what will the perimeter of pentagon A be?

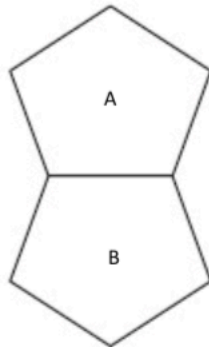


Figure T

- 12) A train took between $1\frac{3}{4}$ hours and 2 hours to complete a journey of 250 km.
What was the train's average speed?

A	120 km/h
B	130 km/h
C	150 km/h
D	165 km/h

- 13) Jill runs 8 times faster than Bob.
How many metres can Bob run in the time it takes Jill to run 1 km?

- 14) A, B, C, D and E are all points on a straight line in that order.
The distance between A and B is 7 cm.
The distance between C and E is 4 cm.
The distance between B and D is 3 cm.
The distance between A and E is 12 cm.
What is the distance between A and C?

15) $\boxed{A}\boxed{B} + \boxed{C}6 = \boxed{D}\boxed{E}0$

- Each of the five letters in the equation above stands for one of the following digits: 1, 2, 4, 5 and 6.
Each letter stands for a different digit.
Which letter stands for the digit 2?

- 16) Ben is a salesman. Every day, he receives no commission on his first five sales, 10% commission on his next two sales and 20% commission on all other sales.
Each sale is valued at £90.
On Monday, Ben makes 13 sales.
How much commission does he receive?

17) Calculate the reflex angle between the hour and minute hands on the clock below.



18) Helen rides her bike for 20 minutes and covers a distance of 16 km.
What is Helen's speed in kilometres per hour?

19) The function \ominus works as follows: $x\ominus = 7x - 4$
Calculate the value of R in the function below.
 $9\ominus = 12\ominus - R$

20) 30% of $0.25y$ is equal to $\frac{1}{3}$ of 27.
Calculate the value of y .
