

Question 1:

Brendan, Oliver and Nathan like eating Asian food. Brendan buys 4 wontons and 5 dumplings for \$7.80 while Oliver buys 12 wontons for \$8.40. Nathan buys 3 wontons and 9 dumplings. How much did this cost him?

Question 2:

A rectangle is formed by seven squares. The perimeter of the rectangle is 144 cm. What is the area, in square centimetres, of one square?



Question 3:

Monica sold half her raffle tickets to her neighbours, a third of the remaining ones to her grandma, and returned the last ten unsold. How many did she sell?

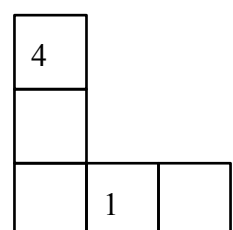
Question 4:

What is the answer when the smallest number is subtracted from the largest of the following numbers.

0.049 0.1 0.72 0.00632 0.0303999

Question 5:

The numbers from 1 to 5 are placed in each square of the diagram, so that the sum of the three numbers in the horizontal row is the same as the sum of the 3 numbers in the vertical column. If the numbers 1 and 4 are placed in the diagram as shown,



then find the sum of the column (or row).

Question 6:

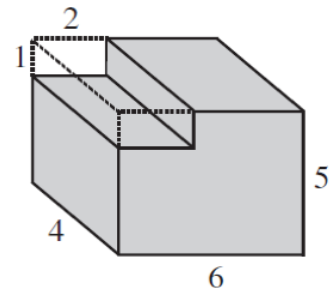
Last year, in a 40 hour famine activity each of 8 volunteers worked 40 hours and were sponsored \$18 per hour. This year, 12 volunteers, each working only 32 hours, raised the same total amount of money. How much did each volunteer raise per hour this year?

Question 7:

The scores of eight students in a maths test are 7, 9, 8, 10, 6, 8, 7, and 8. Which score should be removed to leave seven scores with the same mode and range as the original eight scores, but with a higher mean value?

Question 8:

The volume of the shaded solid on the right is



Question 9:

In this magic square, all rows, columns and diagonals have the same sum.
What is the value of x ?

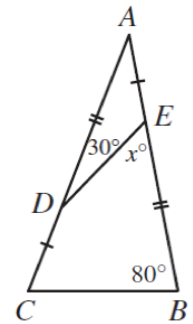
14	19	
	15	
x	11	

Question 10:

There are 13 letterboxes on one side of the street on Kate's way from home to school. Today, on her way to school, Kate put a notice in every other letterbox, starting with the first she passed. When she goes home from school, she will put a notice in every third letterbox, again starting with the first one she passes. By the time Kate arrives at home, how many of the 13 letterboxes will *not* have a notice in them?

Question 11:

The value of x in the diagram on the right is



Question 12:

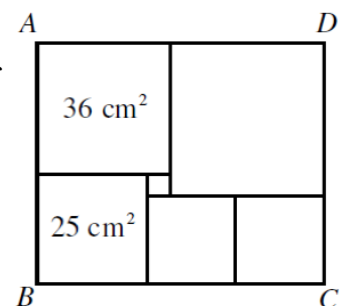
Twenty balls, numbered from 2 to 21 are placed in a container. Each ball is equally likely to be chosen. If one ball is chosen, what is the probability that the number on the selected ball is a prime number?

Question 13:

In the sequence 32, 8, __, __, __, x , each term after the second is the average of the two terms immediately before it. The value of x is

Question 14:

Rectangle ABCD is made up of six squares with the area of two of the squares being 36 m^2 and 25 m^2 as shown in the diagram. The perimeter of rectangle ABCD, in centimetres, is

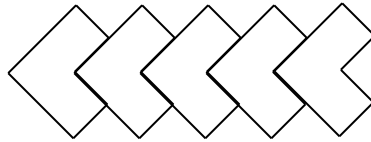


Question 15:

The student lockers at Tangent High School are to be numbered consecutively from 1 to 500 (inclusive) using plastic digits which cost 15 cents each. What is the total cost of all the digits?

Question 16:

Thirty L shaped tiles, each made out of three 1 cm by 1cm squares are arranged as shown. Find the perimeter of the resulting shape (in centimetres).



Question 17:

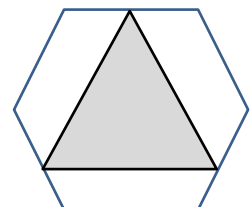
The lunch order for a class was 24 pies, 16 juices and x fruit salads.
Every student ordered one pie.
Ten students ordered a pie, a juice and a fruit salad.
Three students ordered only a pie.
How many students ordered a fruit salad?

Question 18:

There are 41 marbles in a bag. The marbles are either red, green, yellow or blue. There are 3 more red marbles than green marbles, 2 fewer blue marbles than red marbles, and 4 more yellow marbles than blue marbles. How many green marbles are there?

Question 19:

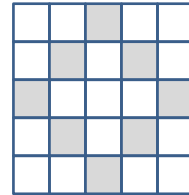
The diagram shows a triangle with its corners at the midpoints of alternate sides of a regular hexagon.



What fraction of the area of the hexagon is unshaded?

Question 20:

This design is made up of grey and white tiles.
It uses 8 grey tiles to form a diamond pattern.
If a similar square design uses 28 grey tiles to form the diamond;
how many white tiles are used?



Question 21:

Tom, Dave, Steve and Gary answered three questions: Q1, Q2, and Q3. Each question is worth a certain number of points. The results are shown in the diagram.
How many points was Q1 worth?

	Q1	Q2	Q3		
Tom	x	*	o	35	
Dave	o	o	o	60	o full points
Steve	*	o	x	20	x no points
Gary	o	x	o	50	* half points

Question 22:

If $a + b = 7$, $b + c = 8$, $a + c = 9$, then the value of abc is

Question 23:

A triangle has an area of 50 cm^2 . Its height and base are the same length.
The height of the triangle, in centimetres, is

Question 24:

What is the value of X in the pattern on the right?

				1						
				1		1				
			1		3		1			
		1		7		5		1		
	1		15		17		7		1	
1		31		49		X		9		1

Question 25:

Four married couples were sitting around a circular table. No man was sitting next to his wife or another man. Mr Gamma was not sitting next to Mrs Beta. Mr Beta was not sitting next to Mrs Delta. Moving clockwise around the table, the women were seated in the same order of their names as the men. Mrs Alpha was sitting on the right of Mr Beta.

Who was sitting on the left of Mr Beta?
