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Middle Primary Division

Questions 1 to 10, 3 marks each

1. What is the value of $20 + 16$?

(A) 24 (B) 26 (C) 36 (D) 9 (E) 216

2. Which of these numbers is the smallest?

(A) 655 (B) 566 (C) 565 (D) 555 (E) 556

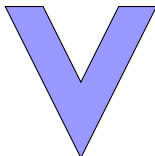
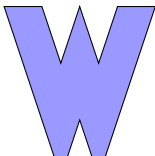
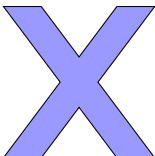
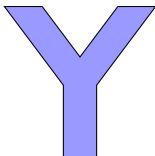
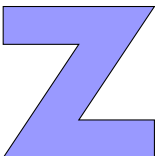
3. In the number 83014, the digit 3 represents

(A) three (B) thirty (C) three hundred
(D) three thousand (E) thirty thousand

4. My sister is 6 years old and I am twice her age. Adding our ages gives

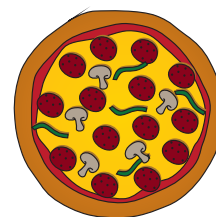
(A) 14 (B) 15 (C) 18 (D) 20 (E) 21

5. Four of these shapes have one or more lines of symmetry. Which one does not?

(A)  (B)  (C)  (D)  (E) 

6. Two pizzas are sliced into quarters. How many slices will there be?

(A) 2 (B) 10 (C) 6
(D) 8 (E) 16

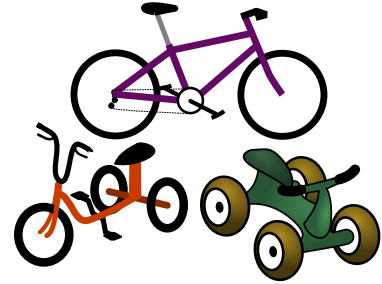


7. Will has a 45-minute music lesson every Tuesday afternoon after school. If it begins at 4:30 pm, at what time does it finish?

(A) 4:45 pm (B) 4:55 pm (C) 4:75 pm (D) 5:00 pm (E) 5:15 pm

8. In our garage there are 4 bicycles, 2 tricycles and one quad bike. How many wheels are there altogether?

(A) 3 (B) 6 (C) 7
(D) 14 (E) 18



9. Ten chairs are equally spaced around a round table. They are numbered 1 to 10 in order. Which chair is opposite chair 9?

(A) 1 (B) 2 (C) 3 (D) 4 (E) 5

10. Lee's favourite chocolates are 80c each. He has five dollars to spend. How many of these chocolates can he buy?

(A) 4 (B) 5 (C) 6 (D) 7 (E) 8



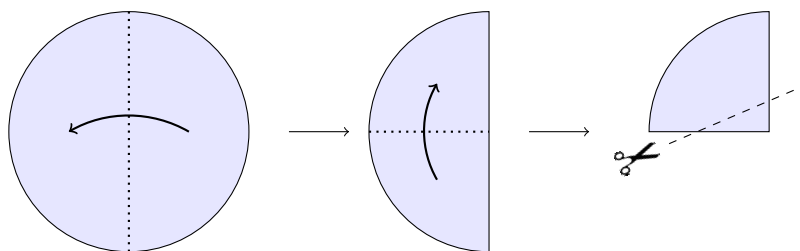
Questions 11 to 20, 4 marks each

11. The four digits 2, 3, 8 and 9 are placed in the boxes so that when both two-digit numbers are added, the sum is as large as possible. What is this sum?

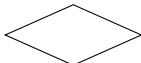




$$\square\square + \square\square$$

(A) 175 (B) 67 (C) 156
(D) 179 (E) 121

12. A circular piece of paper is folded in half twice and then a cut is made as shown.



When the piece of paper is unfolded, what shape is the hole in the centre?

- (A)  (B)  (C)  (D)  (E) 

13. Phoebe put her hand in her pocket and pulled out 60 cents. How many different ways could this amount be made using 10c, 20c and 50c coins?

- (A) 2 (B) 3 (C) 4 (D) 5 (E) 6

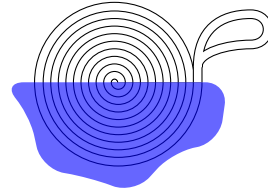
14. There are 5 red, 5 green and 5 yellow jelly beans in a jar.

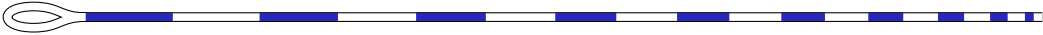




How many would you need to take out of the jar without looking to make sure that you have removed at least two of the same colour?



- (A) 3 (B) 4 (C) 5
(D) 6 (E) 7

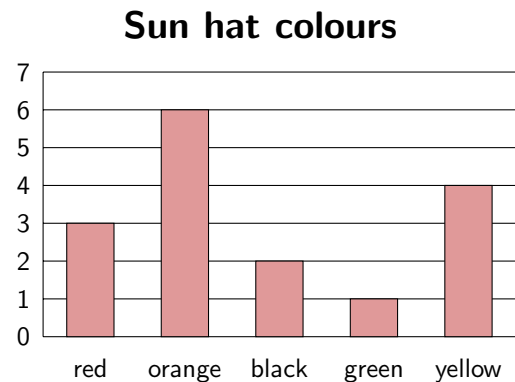
15. A sailor coiled a rope on his ship's deck, and some paint was spilled across half of it. What did the rope look like when it was uncoiled?



- (A) 
- (B) 
- (C) 
- (D) 
- (E) 

16. The students in Mr Day's class were asked the colour of their sun hat. The results are shown in the graph. Mr Day chooses two colours which include the hat colours of exactly half of the class.

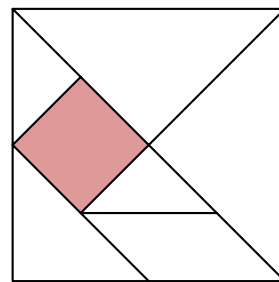
Which two colours does he choose?



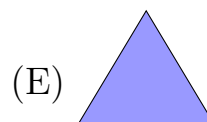
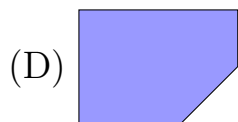
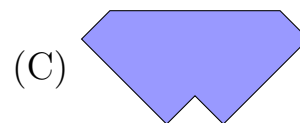
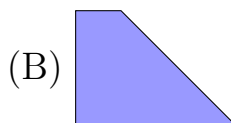
- (A) orange and black
- (B) green and yellow
- (C) black and yellow
- (D) red and orange
- (E) red and yellow
17. The sum of the seven digits in Mario's telephone number is 34. The first five digits are 73903. How many possibilities are there for the last two digits?
- (A) 6 (B) 7 (C) 8 (D) 9 (E) 10

18. If the area of the tangram shown is 64 square centimetres, what is the area in square centimetres of the small square?

(A) 32 (B) 24 (C) 16
(D) 8 (E) 4

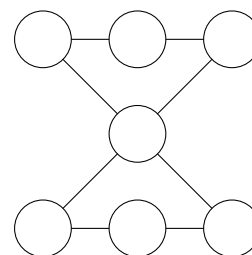


19. By making just one fold on a rectangular piece of paper, which of the following shapes is NOT possible?



20. In this diagram there are four lines with three circles each. Place the numbers from 1 to 7 into the circles, so that each line adds up to 12. Which number must go into the circle at the centre of the diagram?

(A) 7 (B) 6 (C) 5 (D) 4 (E) 2



Questions 21 to 25, 5 marks each

21. Four hockey teams play each of the other three teams once. A win scores 3 points, a draw scores 1 point and a loss scores 0 points. Some figures in the following table are missing. How many points did the Hawks get?

	Played	Win	Draw	Loss	Points
Eagles	3	3			9
Hawks	3				
Falcons	3	0	1		
Condors	3	0		2	1

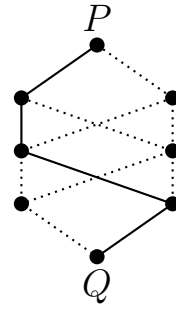
(A) 1 (B) 4 (C) 6 (D) 7 (E) 10

22. In this grid you can only move downward, going from point to point along the lines shown.

One route from P to Q is drawn in.

How many different routes are there from P to Q ?

- (A) 2 (B) 4 (C) 6
(D) 8 (E) 12

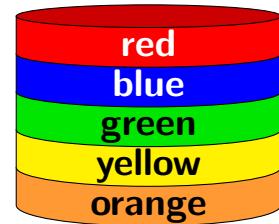


23. I have five coloured discs in a pile as shown.

I take the top two discs and put them on the bottom (with the red disc still on top of the blue disc).

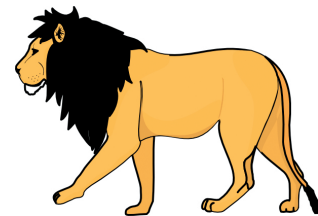
Then I again take the top two discs and put them on the bottom.

If I do this until I have made a total of 21 moves, which disc will be on the bottom?



- (A) red (B) blue (C) green (D) yellow (E) orange

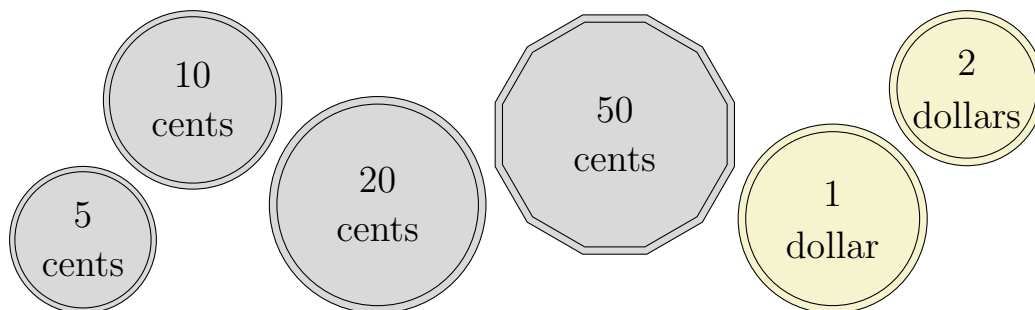
24. A zoo keeper weighed some of the animals at Melbourne Zoo. He found that the lion weighs 90 kg more than the leopard, and the tiger weighs 50 kg less than the lion. Altogether the three animals weigh 310 kg. How much does the lion weigh?



- (A) 180 kg (B) 150 kg (C) 140 kg (D) 130 kg (E) 100 kg

- 25.** Jane and Tom each have \$3.85 in coins, one of each Australian coin. They each give some coins to Angus so that Tom has exactly twice as much money as Jane.

What is the smallest number of coins given to Angus?



- (A) 2 (B) 3 (C) 4 (D) 6 (E) 8

For questions 26 to 30, shade the answer as a whole number from 0 to 999 in the space provided on the answer sheet.

Question 26 is 6 marks, question 27 is 7 marks, question 28 is 8 marks, question 29 is 9 marks and question 30 is 10 marks.

- 26.** With some 3-digit numbers, the third digit is the sum of the first two digits. For example, with the number 213 we can add 1 and 2 to get 3, so the third digit is the sum of the first two digits.

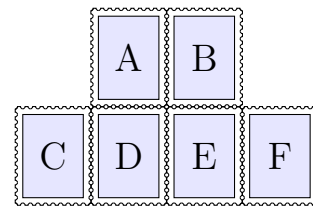
How many 3-digit numbers are there where the third digit is the sum of the first two digits?

27. In a family with two sons and two daughters, the sum of the children's ages is 55.

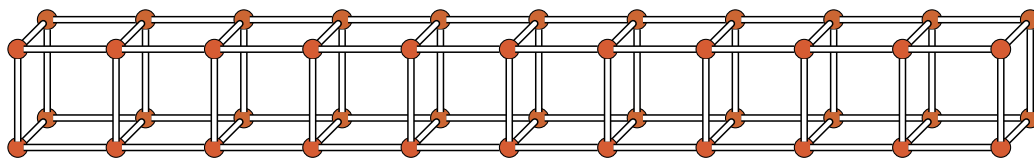
The two sons were born three years apart, and the two daughters were born two years apart. The younger son is twice the age of the older daughter.

How old is the youngest child?

28. From this set of six stamps, how many ways could you choose three stamps that are connected along their edges?



29. A class has 2016 matchsticks. Using blobs of modelling clay to join the matches together, they make a long row of cubes. This is how their row starts.



They keep adding cubes to the end of the row until they don't have enough matches left for another cube. How many cubes will they make?

30. Mary has four children of different ages, all under 10, and the product of their ages is 2016. What is the sum of their ages?