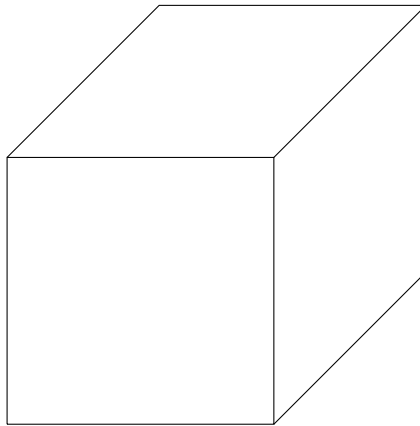

Middle Primary Division

Questions 1 to 10, 3 marks each

1. Ten years after the year 2013 will be

- (A) 2003 (B) 2013 (C) 2014 (D) 2023 (E) 2113
-

2. How many edges does a cube have?



- (A) 4 (B) 6 (C) 8 (D) 9 (E) 12
-

3. Each lap of Laura's school running track is 400 metres long. She runs 3 laps. How far does she run?

- (A) 300 m (B) 600 m (C) 800 m (D) 1200 m (E) 3000 m
-

4. What fraction of this rectangle is shaded?



- (A) one-fifth (B) two-fifths (C) two-thirds
(D) one-third (E) three-fifths
-

5. What is three times the difference between 9 and 3?

- (A) 6 (B) 9 (C) 18 (D) 36 (E) 81

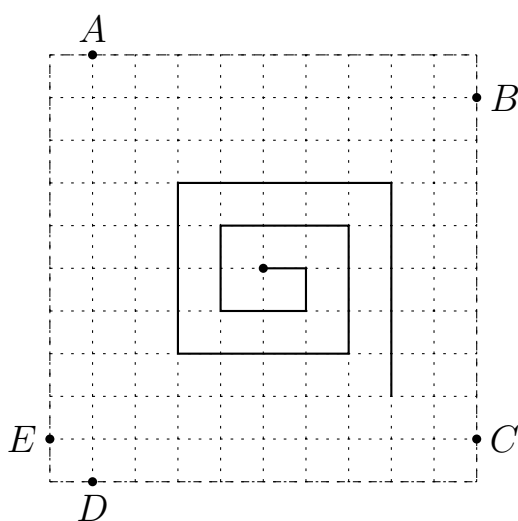
6. Jenny's hat has the words COTTON CLUB written on it. What does she see on her hat when she looks in the mirror?

- (A) BULG NOTTOG (B) BUJG NOTTOG (C) BULG NOTTOG
(D) BUJG NOTTOG (E) BULG NOTTOG

7. Sally is playing a board game where you throw a dice numbered from 1 to 6, move along a numbered board and then follow the instructions on each square you land on. On one turn, she throws a 6 and lands on a square which tells her to go back 4 squares. This puts her on a square which tells her to go forward 3 squares. She finishes up on square 7. What square did she start that turn on?

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

8. Joel is in the centre of a maze which fills a 10-metre square. He knows he can get out of the maze if he follows the path in the spiral pattern below. The maze has exits on the boundary at A, B, C, D and E. By which exit will Joel leave the maze?



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

9. What is the difference between the largest and smallest 3-digit numbers which can be made from rearranging the 3 digit cards below?



- (A) 198 (B) 200 (C) 202 (D) 298 (E) 302
-

10. Brad thinks of a number, doubles it and adds 2. His result is 14. What was the number he thought of at the start?

- (A) 6 (B) 7 (C) 8 (D) 12 (E) 30
-

Questions 11 to 20, 4 marks each

11. Alice has two 50c coins, three 20c coins and eight 5c coins. David has four 20c coins and six 10c coins. How much more money does Alice have than David?

- (A) 40c (B) 60c (C) 80c (D) \$1.40 (E) \$2.00
-

12. Jim is one year older than his brother and one year younger than his sister. The sum of their three ages is 30. How old is his sister?

- (A) 8 (B) 9 (C) 10 (D) 11 (E) 12
-

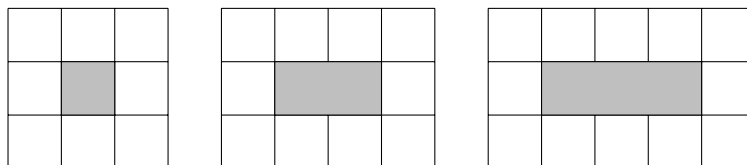
13. Mary counts on in 3s starting at 30 whilst John counts on in 5s starting at 20. If they say each number out loud together, starting at the same time, what same number will they both say together?

- (A) 30 (B) 40 (C) 45 (D) 50 (E) 60
-

14. Given a 2-digit number, a new 3-digit number is formed by putting the digit 1 after it. The new number is

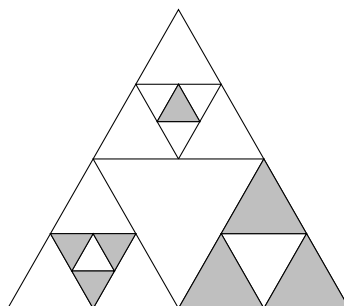
- (A) the original number plus 1
(B) ten times the original number plus 1
(C) one hundred plus the original number
(D) one hundred times the original number
(E) one hundred times the original number plus 1
-

19. George is planning a garden bed which is to be 1 metre wide and a whole number of metres long. It is to be surrounded by 1 metre \times 1 metre pavers as shown in the diagrams below. As the design for the garden gets longer, the number of pavers needs to increase.



Which of the following best describes the number of pavers required for each garden bed design?

- (A) The number of pavers needed is 8 times the length of the garden bed.
- (B) The number of pavers needed is 6 times the length of the garden bed plus 2.
- (C) The number of pavers needed is 4 times the length of the garden bed.
- (D) The number of pavers needed is 4 times the length of the garden bed plus 2.
- (E) The number of pavers needed is 2 times the length of the garden bed plus 6.
-
20. Each triangle in the diagram is equilateral. What fraction of the largest triangle is shaded?



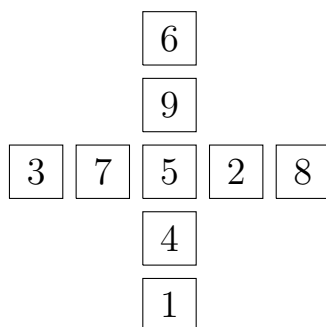
- (A) $\frac{1}{4}$ (B) $\frac{15}{64}$ (C) $\frac{1}{3}$ (D) $\frac{3}{16}$ (E) $\frac{7}{32}$

Questions 21 to 25, 5 marks each

- 21.** Kathy plays Eddie in a game with 12 rounds. In each round the winner scores 5 points and the loser scores 3 points. When the game ends, Eddie's total score is 46 points. How many rounds did Kathy win?

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

- 22.** Nine cards numbered 1 to 9 are set out as in the diagram. The sum of the numbers in the vertical column is equal to the sum of the numbers in the horizontal row. How many different numbers could be used in the central square of the diagram?

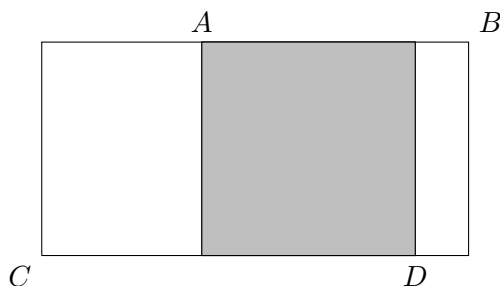


(A) 1 (B) 3 (C) 5 (D) 7 (E) 9

- 23.** There are thirty 20c coins in a row. I replace every second coin with a 50c coin. Next, I replace every third coin with a \$1 coin. Finally, I replace every fourth coin with a \$2 coin. The value of the thirty coins is now

(A) \$18.50 (B) \$22.80 (C) \$25.60 (D) \$26.50 (E) \$27.80

24. There is a shaded square inside a rectangle as shown. From A to B is 6 cm and from C to D is 8 cm. What is the perimeter of the large rectangle?



- (A) 28 cm (B) 27 cm (C) 26 cm (D) 25 cm (E) 24 cm

25. Jake and Joe wanted to buy the same magazine. Jake needed \$2.80 more to buy it, while Joe needed \$2.60 more. So they put their money together and bought the magazine. They had \$2.60 left. How much was the magazine?

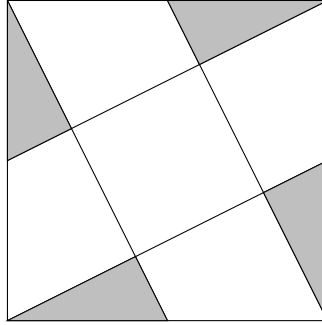
- (A) \$10 (B) \$9 (C) \$8 (D) \$7 (E) \$6

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. I take 2 vitamin C tablets every day. If I increase my dose to 3 tablets a day, a full bottle would last 8 days less. How many tablets are in a full bottle?

- 27.** Each side of this large square is 30 cm. The middle of each side is joined to a corner as shown. What area, in square centimetres, has been shaded?



- 28.** Starting at 100 and going through to 999, how many numbers have two or more digits the same?
-

- 29.** In how many ways can three different numbers be selected from the numbers 1 to 12, so that their sum can be exactly divided by 3?
-

- 30.** Adam, Barney and Joe carry 999 books out of the library. Adam works for 3 hours, Barney works for 4 hours and Joe works for 5 hours. They work at different speeds, with Adam carrying 5 books for every 3 books Barney carries and every 2 books Joe carries. How many books did Adam carry?
-