Questions **1** to **5** carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(10 marks)

*1.   A baker made some cupcakes for sale. He sold 450 cupcakes in the morning and 0.6 of the remainder in afternoon. He was left with 10% of the original number of cupcakes. How many cupcakes did he make?
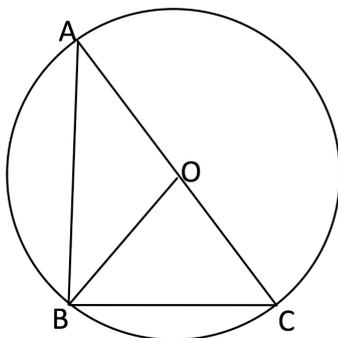
(M)

Answer: _____

*2.   A van took 3 hours to travel from Town A to B at an average speed of 65 km/h. A lorry travelled along the same route at an average speed of 75 km/h and arrived at Town B at 1630h. What time did the lorry leave Town A?

(M)

Answer: _____

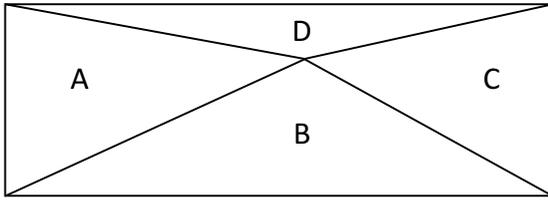***3.**   In the figure below, the line AOC is the diameter of the circle. ∠ACB = 55°. Find ∠AOB.

(M)

Answer: _____°

4. The rectangle below is sub-divided into four triangles A, B, C and D. If the areas of triangles B, C and D are 31 cm², 22 cm² and 19 cm² respectively, express the area of triangle A as a percentage of the area of the rectangle.

(M)

Answer: _____%

5. Hajar spent 25% of her money on 14 stickers and 6 coins. The cost of each coin was 3 times the cost of each sticker. She bought some more of such stickers with $\frac{5}{6}$ of her remaining money. How many stickers did she buy altogether?

(M)

Answer: _____

For Questions 6 to 18, show your workings clearly and write your answers in the spaces provided. The number of marks available is shown in the brackets [   ] at the end of each question or part-question.

(50 marks)

*6. In a bus, the ratio of female to male passengers was 5 : 3. When 16 female passengers got off the bus, the new ratio became 11 : 9. How many passengers were there in the bus in the end?

(M)

Answer: _____[3]

*7. The amount of sales at a supermarket had increased by 20% from June to July. However, the amount of sales decreased by 30% in August compared to July. The difference in the amount of sales between June and August was $8000. Find the total amount of money collected during the three months.

(M)

Answer: _____[3]

*8. Box A contained only 50-cent coins while Box B contained only 20-cent coins. There were 19 more coins in Box B than in Box A. The total amount of money in both boxes was $15. How many 50-cent coins are there?

(M)

Answer: _____[3]

*9. The number of toy cars Ilyas had was 20% the number of toy aeroplanes. After he gave 50% of his toy aeroplanes and $\frac{1}{3}$ of his toy cars to his brother, he had 286 more toy aeroplanes than toy cars. How many more toy aeroplanes than toy cars did his brother receive?

(M)

Answer: _____[3]

10. A tank has a rectangular base 20 cm by 16 cm. It was $\frac{2}{3}$ filled with water to a height of 20 cm. When a metal ball was slowly immersed into the tank, the height of the water level was 1.5 cm from the brim of the tank. Find the volume of the metal ball.

(M)

Answer: _____[3]

*11. Idris had some 20-cent coins and 50-cent coins. He spent half of his 20-cent coins and 75% of his 50-cent coins. The value of 20-cent coins left was the same as the value of 50-cent coins left. Given that the difference between the value of 20-cent coins and the value of 50-cent coins he had at first was $40, how much did Idris have at first?
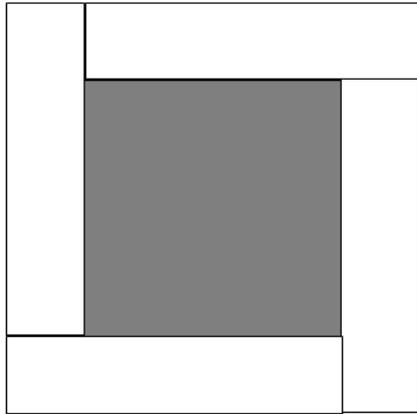
(C)

Answer: _____[4]

12. 60% of the people at a party were adults. 75% of the remainder were boys. There were 150 more adults than girls. After more children joined in the party, the number of adults was $\frac{5}{8}$ of children. How many children joined in the party?

(C)

Answer: _____[4]

*13. The figure below is made up of 4 identical rectangles and a shaded square. The perimeter of each rectangle is 30 cm. The area of the shaded square is 17 cm² greater than the total area of the 4 rectangles. Find the length of the shaded square.

(C)

Answer: _____[4]

*14. Yahya paid a total of $2219 for a shipment of T-shirts and shorts. The ratio of the number of shorts to the number of T-shirts is 3 : 2. A T-shirt cost $5.50 more than a pair of shorts. Given that he spent $259 more on the shorts than the T-shirts, find the cost of one pair of shorts.

(C)

Answer: _____[4]

*15. Isa and Maryam had some money. If Isa gave Maryam $20, the ratio of Isa's money to Maryam's money would become 3 : 5. If Isa gave Maryam $70, the ratio of Isa's money to Maryam's money would become 1 : 3. How much does each of them have?
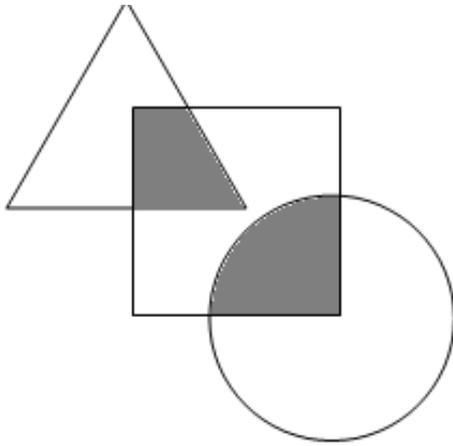
(M)

Answer: Isa_____

Answer: Maryam_____ [4]

*16. The figure is made up of three overlapping shapes, Triangle A, Square B and Circle C. 20% of Triangle A and 20 % of Circle C are shaded. The ratio of the area of Triangle A to the area of Square B to the area of Circle C is 3 : 4 : 5. Find the ratio of the area of the shaded parts to the area of the unshaded parts of the figure.

(M)

Answer: _____[5]

*17. Khadijah spent $1560 to buy some boxes of chocolate and butter cookies.
(C) Each box of chocolate cookies cost $22 and each box of butter cookies cost $25. The chocolate cookies were packed in boxes of 12 cookies each and the butter cookies were packed in boxes of 10 cookies each. She bought an equal number of chocolate and butter cookies. She bought a total of less than 800 cookies altogether.

a) How many boxes of chocolate cookies did she buy?

b) How many boxes of butter cookies did she buy?

a) Answer: _____[4]

b) Answer: _____[1]

*18. Aisyah left Town A and drove towards Town C. After driving for $\frac{1}{4}$ of the journey at an average speed of 72 km/h for 40 min, she stopped at Town B to have a break of 20 min. Then she carried on with the journey at an average speed of 80 km/h. She reached Town C at 3.45 pm.

a) What was the distance between Town A and Town C?

b) What time did Aisyah leave Town A?

(C)

a) Answer: _____[2]

b) Answer: _____[3]

- END OF PAPER 2 -