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. Ilyas is 150 cm tall. He is *w* cm taller than Isa but 10 cm shorter than Yahya. What is the total height of the three boys in cm? Express your answer in terms of *w*.

(M)

Answer: _____cm

*2. $\frac{5}{6}$ of Sarah's height is equal to $\frac{1}{3}$ of Mariam's height. Find the ratio of Mariam's height to Sarah's height.

(M)

Answer: _____

***3.** The ratio of Mr Ismail's monthly income to his monthly expenditure is 7 : 5. Mr Ismail saves \$5 640 each year. How much is Mr Ismail's monthly income?

(M)

Answer: \$_____

4. In the figure below, PQRS is a square and triangle PRT is an isosceles triangle. Find \angle QPT.

(M)



Answer: _____°

- **5.** The perimeter of a rectangular piece of cardboard ABCD is 150 cm. It is cut into 4 identical smaller rectangles shown below. What is the perimeter of one small rectangle?
- (M)



Answer: _____cm

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. Sumaiyah spent \$48 on a toy and $\frac{1}{7}$ of her remaining money on a pencil. She had $\frac{2}{5}$ of her money left. How much money did she have at first? (M)

Answer: _____[3]

***7.** A circle and a triangle overlapped as shown in the figure below. The shaded part is the overlapped area. The area of the circle is thrice that of the triangle. The area of the unshaded part of the circle is 18 cm² more than the unshaded part of the triangle. What is the area of the circle?





*8. At a fruit stall, there was a total of 200 pears and kiwis. After 40% of the pears and 25% of the kiwis were sold, there were 132 pears and kiwis left. How many pears were there at first?

(M)

Answer: _____[3]

*9. Nuh, Adam and Shuaib shared some coins in the ratio of 3:6:5. Shuaib kept $\frac{1}{5}$ of his coins for himself and gave the rest of his coins to Nuh and Adam in the ratio of 3:5. As a result, Adam had 96 more coins than Nuh. How many coins did Nuh have in the end?

(C)

10. Hajar and Shireen started cycling from the same place in opposite directions along a straight path. 15 minutes later, they were 12 km apart. Hajar's average speed was 20 km/h. What was Shireen's average speed?

(M)

Answer: _____[3]

*11. Some adults and children visited an exhibition, 75% of the visitors at the exhibition were adults and 20% of the remaining visitors were boys. There were 330 more adults than girls. How many visitors were there at the exhibition?

(C)

12. Mariam put some money in four boxes W, X, Y and Z. The amount of money in Box W was $\frac{2}{7}$ of the total amount of money in boxes X, Y and Z. The amount of money in Box X was 40% of the total amount of money in the four boxes. The amount of money in Box W, X and Z was thrice the amount of money in Box Y. If there was \$92 in Box Z, find the total amount of money in Box W and Z.

(C)

*13. There were 330 yellow and red beads in a bag. Joanne removed $\frac{1}{2}$ of the yellow beads and $\frac{3}{4}$ of the red beads. In the end there were 90 yellow and red beads left in the bag. How many red beads where there in the bag at first?

(C)

- *14. Iffah and Nadia started driving along a 30-km road from Sengkang to Boon Lay at the same time. Iffah drove at an average speed of 75 km/h and she arrived 12 minutes earlier than Nadia. Nadia travelled at constant speed throughout the journey.
- a) How long did Iffah take to travel from Sengkang to Boon Lay?
- b) How far had Nadia travelled when Iffah reached Boon Lay?

(M)

a) Answer: _____[1]

b) Answer: _____[3]

*15. Sabrina, Mira and Dalilah shared a bag of lollipops equally. Sabrina put her share equally into 4 jars. Mira put her share equally into 6 tins and Dalilah put her share equally into 8 boxes. The total number of sweets in 3 of Sabrina's jars, 5 of Mira's tins and 7 of Dalilah's boxes was 177. What was the total number of lollipops in the bag?

(M)

- *16. At first, 25% of Afiq's money was the same as $\frac{1}{3}$ of Ellie's money. Then, Ellie's father gave her \$80 while Afiq spent \$150. In the end, Ellie had $2\frac{1}{2}$ times as much money as Afiq.
- a) How much money did Afiq have at first?
- b) How much money did Ellie have in the end?
- (M)

a) Answer: _____[3]

b) Answer: _____[2]

- *17. A delivery man was paid \$8 for each delivery made on time. He would not be paid if the delivery was late, instead, he had to pay a fee of \$5. For every 17 deliveries he made in August, 11 were on time and 6 were late.
- a) If he earned a total of \$1682 in August, how many deliveries did he make?
- b) How much more would he earn in August if all his deliveries were on time?

(M)

a) Answer: _____[3]

b) Answer: _____[2]

*18. Safiyah and Luth shared some books. Safiyah's share was 30 fewer than Luth's share. After Luth gave $\frac{1}{3}$ of his share to Safiyah, Safiyah had 12 more than Luth. How many books did Safiyah have at first?

(C)

Answer: _____[5]

- END OF PAPER 2 -