# GRADE 4-5 – TEST PAPER SET 4

Question 1. There are 65% of the students at Raffle Junior High School play piano, 40% of the students play basketball and 25% of the students both play piano and basketball. What is the percentage of the number of students who do neither play piano nor play basketball at Raffle Junior High School?

Question 2. A book has 188 pages. How many digits are used for printing all the page numbers?

Question 3. Find the sum of all the digits of 11 111 111 × 11 111 111.

Question 4. Observe the figures below and find the value of X.

156	127
279	308

490	194
367	663

218	x
142	178
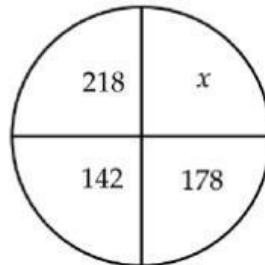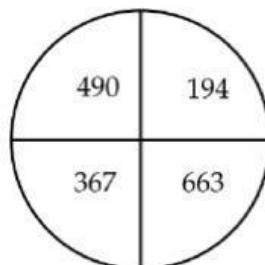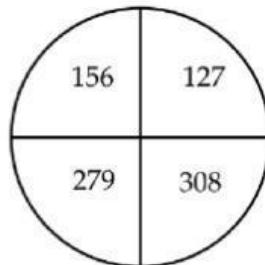
Question 5. A number is added to 8 and the sum is multiplied by 8. Then, the result is subtracted 8 from the product. The difference is then divided by 8. The result is also 8. Find the number.

Question 6. On the first day, Fabrian read 15 pages more than half of a story book. On the second day, he read 20 pages fewer than half of the remaining number of pages. He had 60 pages to finish on the third day. How many pages does the book have?

Question 7. A pigeon ate 828 earthworms, in total, for 4 consecutive nights. Each night, he ate 36 earthworms more than the previous night. How many earthworms did the pigeon eat on the first night?

Question 8. A frog has fallen into a ditch which is 11 meter deep. Each day the frog climbs 4 meter and than falls back by 2 meter. In how many days will the frog reach the top?

Question 9. What is the greatest three-digit number which is divisible by 2, 3 and 5?

Question 10. The number of days left in the month of September are five times the number of days already passed. How many days have already passed in the month of September?

Question 11.

$$1 + 2 = 3$$
$$4 + 5 + 6 = 7 + 8$$
$$9 + 10 + 11 + 12 = 13 + 14 + 15$$
$$16 + 17 + 18 + 19 + 20 = 21 + 22 + 23 + 24$$

$$\cdots$$

What is the largest number in the 10th row?

Question 12. There are 10 matchsticks on the table. In how many ways can they be removed if only either one or two matchsticks can be taken away each time?

Question 13. The perimeter below is formed using five identical rectangles. The perimeter of the figure is $66cm$. Find its area.
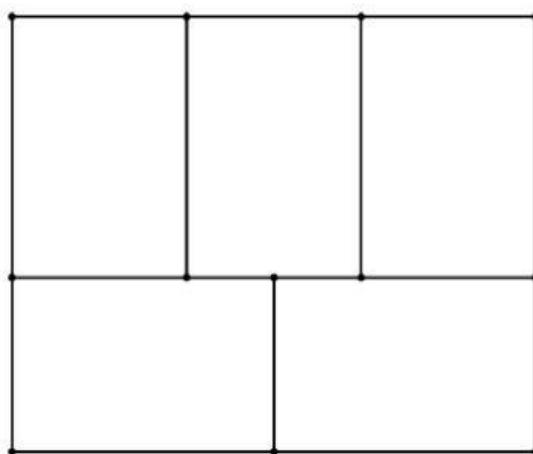
Question 14. 6 basketball teams took part in a zonal league. Each team was to play exactly one match with another. Team A played 5 matches so far. Team B had already played 3 matches. Team C and F had played one match each. How many match(es) had Team E played?

Question 15. Mr Culkin took 80 seconds to walk up to the sixth floor from the first floor using the staircase. How many seconds did he take to walk from the first floor to the 27th floor?

Question 16. The PE teacher sends some students to collect three balls each from the PE room. There are 5 kinds of balls in the PE room. What is the minimum students must he send so that there are at least two students have the same combination of balls?

Question 17. Cindy is 12 years old. One day, she asked about her auntie's age. "I'll be 62 years old by the time you reach my present age", replied her auntie. How old is Cindy's auntie at the present?

Question 18. A meteorological report shows the following records of a certain number of days. It rained 20 times, either in the morning or in the evening. There were 16 dry afternoons, there were 28 dry mornings. In a day, if it rained in the afternoon, it meant that day had dry morning. How many days did meteorologists record?

Question 19. The base of a trapezium is $\frac{2}{3}$ the length of its other base. The areas of the 2 triangles shown are $20cm^2$ and $24cm^2$. Find the total area of the shaded regions.

$20cm^2$

$24cm^2$
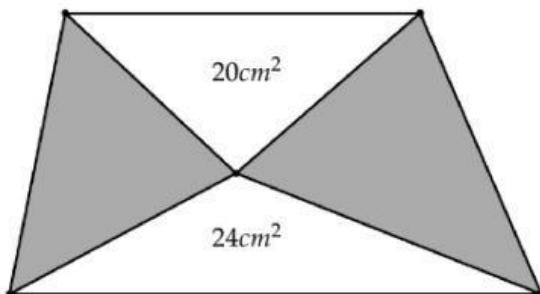
Question 20. Given a figure with a circle inscribed in a right-angled triangle with sides of length 6, 8 and 10, compute the diameter of the circle.
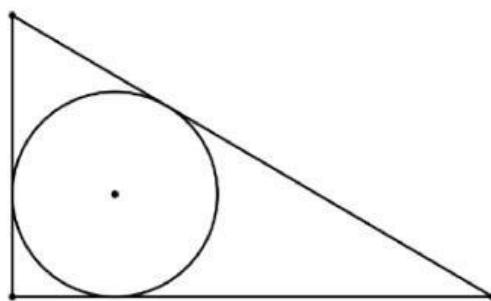

Question 21. Observe the following pattern. What is the missing number?

35   56   15   ?

6 4   6 7   2 4   4 7
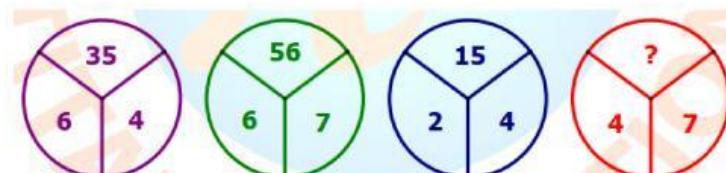
Question 22. Four boys each prepared 1 gift for a party. How many ways can these 4 gifts be distributed among the 4 kids so that no one receives his own gift?

Question 23. Andy had a square piece of paper with perimeter 72 as figure 1. Then he cut the paper into 2 identical parts to combine it into a rectangle as figure 2. Find the perimeter of the figure 2.

Figure 1   Figure 2
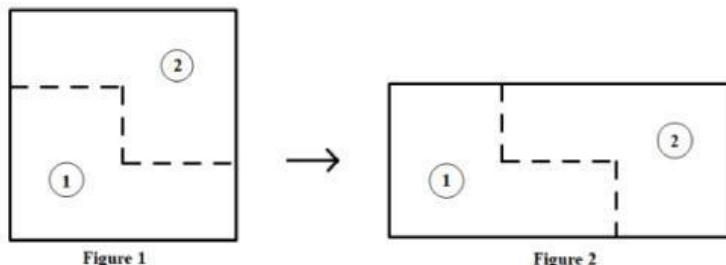
Question 24. The weight of Ashley and Ben is 75kg. The weight of Ben and Chelsea is 81kg. The weight of Chelsea and Ashley is 84kg. Dan weighs 3kg more than the average weight of 4 friends. Find Dan's weight in kg.

Question 25. Given that $2*3 = 3+5$, $3*4 = 4+7+10$, $4*5 = 5+9+13+17$. Find the value of $4*6$.