Entry Test

Academic Session 2019-20

MATHEMATICS

Write in block letters:

Candidate Name

Date

Kindly read the instructions carefully;

1   **Answers must be written in ink.**

2   **Write the number of question distinctly before each answer.**

3   **CALCULATOR IS ALLOWED.**

FOR OFFICIAL USE ONLY

Total Marks		Marks Obtained		Percentage	

Q. 1   Write the multiples of 6 which are greater than 20 and less than 50.

[1]

Q.2   Encircle prime numbers.   [1]

21, 31, 49, 59, 63, 91, 40

Q3. Find the positive square root of   900   [2]

Q4. Express 142.8315 correct to   [4]

a) 1 decimal places :   _____

b) nearest whole number : _____

c) the nearest hundredth : _____

d) 4 significant figures. _____

Q.5   Factorise:

i. $x^2 + xy + 9x + 9y$ [1]

ii. $(5a - b)(3a - b) - (2a - b)(3a - b)$ [2]

Q.6.   Simplify the following   [3]

$$\frac{3a + 4}{2} - \frac{2a + 3}{3} = 2$$

Q7. What is 10% of $40?   [1]

Q8. There were 35 children and 10 adults at a cookout.   [1+1]

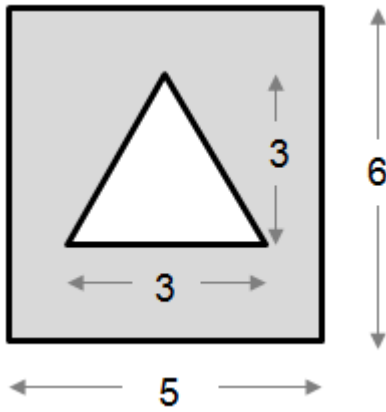 a. What is the ratio of adults to children at the cookout?

b. What is the ratio of children to total people at the cookout?

Q9. Annie earns $320 for 8 hours of work. At that rate, how long would she have to work to earn $1,120?   [2]

Q10. A student earned a grade of 80% on a math test that had 20 problems. How many problems on this test did the student answer correctly?   [2]

Q11. Find the area of shaded region. [2]

Q12. Find the perimeter of the figure below. [2]