

Name of student: _____

Subject: _____

Mathematics _____

Grade: 8 section: _____

Semester: 1st

INSTRUCTION- I. CHOOSES THE CORRECT ANSWERS FROM THE GIVEN ALTERNATIVES

- Which of the following numbers is not rational number?
A. 5 B. -3 C. $\frac{1}{2}$ D. $\sqrt{2}$
- What is the multiplicative identify of rational number?
A. 0 B. 1 C. 2 D. -1
- Calculate the sum of $\frac{3}{4}$ and $\frac{5}{6}$.
A. $\frac{1}{3}$ B. $\frac{7}{12}$ C. $\frac{1}{2}$ D. $\frac{19}{12}$
- An integer can be
A. only positive B. only negative C. zero positive and negative
D. none
- By using the properties of rational number, solve the following equation $(8 + 0) + (6 \times 3)$
A. 26 B. 24 C. 28 D. 0
- Which of the following type of numbers are closed under only multiplication?
A. Rational number B. Integers C. whole number D. natural number
- Which of the following rational number lies between $-\frac{4}{5}$ and $-\frac{7}{5}$
A. $-\frac{35}{45}$ B. $-\frac{36}{45}$ C. $-\frac{39}{45}$ D. $-\frac{63}{45}$
- $\sqrt{0.0169}$ is equal to _____
A. 0.13 B. 13 C. 1.3 D. 0.013
- If m is the cube root of n, then n is _____
A. m^3 B. $\sqrt{m}$ C. $\frac{m}{3}$ D. $\sqrt[3]{m}$
- Which of the following is not true
A. The square of even number is even
B. The square of odd number is odd
C. The difference of the square of two consecutive number is 1.
D. None
- Which of the following numbers is a perfect square?
A. 16 B. 18 C. 20 D. 22
- Which of the following numbers is a perfect cube?
A. 27 B. 32 C. 36 D. 40
- What is the square root of 64?
A. 6 B. 7 C. 8 D. 9

14. What is the value of 6 cubed?
A. 216 B. 228 C. 240 D. 252
15. What is the cube root of 512?
A. 6 B. 8 C. 10 D. 12
16. What is the value of $(\sqrt{4})^2$?
A. 1 B. 2 C. $\sqrt{2}$ D. 4
17. What is the cube root of 0.001?
A. 0.01 B. 0.1 C. 0.3 D. 0.03
18. What is the value of $(4 \times 3)^2$?
A. 64 B. 144 C. 256 D. 512
19. What is the value of $\sqrt{16}$?
A. 4 B. 8 C. 16 D. 32
20. What is the cube root of 0.008?
A. 0.02 B. 0.08 C. 0.2 D. 0.8
21. The length of a side square is 5 centimeters. What is the area of the square?
A. 5cm B. 25cm C. 5cm^2 D. 25cm^2
22. A square painting has an area of 196 square meters. What is the length of each side of painting?
A. 196m B. 29m C. 14m D. 1m
23. The volume of a cube 1000 cubic meters. What is the length of each side of the cube?
A. 10m B. 100m C. 15m D. 200m
24. The side length of a cube is 7 centimeters. What is the volume of the cube?
A. 343cm^3 B. 49cm^3 C. 7cm^3 D. 21cm
25. Which of the following statement is true?
A. $\frac{\sqrt{27}}{\sqrt{3}} = \sqrt{\frac{27}{3}}$ B. $\frac{\sqrt{18}}{\sqrt{2}} = \sqrt{9}$ C. $\frac{2\sqrt{625}}{50} = 1$ D. all
26. What is the decimal representation of the fraction $\frac{3}{5}$?
A. 0.3 B. 0.5 C. 0.6 D. 0.8
27. Which of the following is an irrational number?
A. 0.75 B. 1.5 C. $\sqrt{6}$ D. $\frac{3}{4}$
28. What is the reciprocal of $\frac{2}{3}$?
A. $\frac{2}{3}$ B. $\frac{3}{2}$ C. $\frac{1}{6}$ D. $\frac{6}{1}$
29. Which of the following numbers is a rational number?
A. $\sqrt{5}$ B. 0.4 C. -1.2 D. 2π
30. Mr. Johnson spent $\frac{2}{5}$ of his monthly salary on rent and $\frac{1}{4}$ on groceries. What fraction of his salary did he spend in total?
A. $\frac{3}{9}$ B. $\frac{9}{20}$ C. $\frac{7}{20}$ D. $\frac{13}{20}$
31. Convert the $5\frac{3}{7}$ to improper fraction.

- A. $\frac{38}{7}$ B. $\frac{7}{38}$ C. $\frac{15}{7}$ D. $\frac{30}{7}$
32. The temperature at noon was -5 degrees Celsius. Throughout the day, the temperature increased 8 degrees Celsius. Which of the following statements is true?
 A. -5 degrees Celsius is a whole number and a rational number.
 B. -5 degrees Celsius is a natural number and a rational number.
 C. -5 degrees Celsius is an integer and a rational number.
 D. -5 degrees Celsius is an irrational number.
33. Convert the decimal 0.625 to a fraction in simplest form.
 A. $\frac{5}{8}$ B. $\frac{5}{9}$ C. $\frac{5}{10}$ D. $\frac{5}{11}$
34. The sum of $(0.1+0.2)\frac{1}{2}$
 A. $\frac{2}{10}$ B. $\frac{20}{3}$ C. $\frac{3}{20}$ D. $\frac{4}{19}$
35. Convert the fraction $\frac{17}{20}$ to a decimal.
 A. 0.85 B. 0.875 C. 0.9 D. 0.95
36. $\sqrt{7\frac{1}{9}}$ = _____
 A. $\frac{64}{9}$ B. $\frac{8}{3}$ C. $\frac{9}{64}$ D. $\frac{3}{8}$
37. $\sqrt[3]{216} - \sqrt[3]{64}$ is equal to _____
 A. 6 B. 3 C. 2 D. 1
38. Which of the following statement is not true?
 A. $-3^2 = 9$ B. $-3^2 = (-3)^2$ C. $X^2 = 2x$ D. all
39. The simplest form of the expression $\frac{\sqrt[3]{24}}{\sqrt[3]{3}}$ is _____
 A. 1 B. 2 C. 3 D. 4
40. Which of the following statement is true?
 A. $\sqrt{\frac{a}{b}} = \frac{\sqrt{a}}{\sqrt{b}}$ B. $\sqrt{ab} = \sqrt{a} - \sqrt{b}$ C. $(ab)^2 = a^2b^2$ D. all