Grade 8 Maths Exam preparation
Worksheet Two

1) Which of the following rational numbers are positive? Select all that apply

    a. (-8)/7

    c. (-19)/(-13)

    b. 9/8

    d. (-21)/13

2) Which of the following rational numbers are negative? Select all that apply

    a. (-3)/7

    c. 9/(-83)

    b. (-5)/-8

    d. (-115)/-197

3) Which is the following statement is not true?

    a. Every whole number is a rational number.

    b. Every integer is a rational number.

    c. 0 is a whole number but it is not a rational number.

    d. The difference of two rational numbers a rational number?

4) Which of the following statement is false?

    a. The difference of two rational numbers a rational number?

    b. The negative of a negative rational number is positive?

    c. 1 is the multiplicative identity of rational numbers.

    d. Multiplicative inverse of a negative rational number is positive rational number

5) Which one of the following statement is false

    a. The product of a rational number and its reciprocal is always equal to 1

    b. The reciprocal of zero is equal to 0

    c. The reciprocal of 1/a, where a ≠ 0, is a.

d. The reciprocal of a negative rational number is positive .

e. b and d

6) What will be the value of the expression $n - (m + n)$; if $m = 2$, and $n = -3$

    a. -2   b. -2   c. 3   d. 4

7) Find the decimal number between the rational numbers 3 /11 and 4 /11.

    a. 0.2222222222...   c. 0.3939393939...

    b. 0.3333333333...   d. 0. 2121212121..

8) What is the slope and y-intercept for $2x - y = 5$

    a. **Slope 2 and y intercept is -5**   c. Slope is -2 and y intercept is -5

    b. Slope -2 and y intercept is 5   d. Slope is 2 and y intercept is 5

9) What is the slope and y-intercept for $-15 = -3y - 9x$

    a. Slope -3 and y intercept is -5   c. Slope 3 and y intercept is -5

    b. **Slope -3 and y intercept is 5**   d. Slope 3 and y intercept is 5

10) In Science class, Jeslyn watched an insect crawl $3\frac{1}{6}$ inches in one minute. The next minute the insect crawled $2\frac{3}{4}$ inches. How far did the insect crawl in total?

    a. $5\frac{11}{12}$ inches   c. $\frac{7}{8}$ inches

    b. $\frac{71}{12}$ inches   d. a and b

11) Three places are on a straight line as shown in the picture below.

The distance from A to C is 7 miles and the distance from B to C is $\frac{2}{5}$ of the distance from A to C. Find the distance from A to B.

a. $\frac{23}{5}$ Miles

c. $\frac{35}{7}$ Miles

b. $4\frac{1}{5}$ Miles

d. $\frac{4}{9}$ Miles

12) Alex had 450 Birr, he spent two-fifth of the money for clothes and one-third of the rest for food. After spending money for clothes and food, how much does he have left?

a. 90 Birr

c. 180 Birr

b. 250 Birr

d. 120 Birr

13) There are 15,000 books in a library. One-fifth of the book are English, two-third of the books are French and the rest are Spanish. Find the number of Spanish books in the library?

a. 1200

c. 750

b. 300

d. 2000

14) From a rope 11 m long, two pieces of lengths $\frac{13}{5}$ m and $\frac{33}{10}$ m are cut off. What is the length of the remaining rope?

a. $\frac{3}{10}$ m

c. $\frac{5}{12}$ m

b. $\frac{51}{10}$ m

d. $\frac{9}{7}$ m

15) A car is moving at an average speed of $\frac{40}{5}$ km/hr. How much distance will it cover in $\frac{1}{2}$ hours?

a. 3 Km

c. 8Km

b. 4 Km

d. 3.5 Km

16) What will be the area of a rectangular park which is $\frac{18}{5}$ m long and $\frac{5}{3}$ m broad.

    a.   16 m^2 b. 56 m^2 c. 6 m^2 d. 18 m^2

17) What is the area of a square plot of land whose each side measures $\frac{3}{2}$ meters.

    a. $\frac{9}{2}$ m^2 c. 3 m^2

    b. $\frac{9}{4}$ m^2 d. $\frac{6}{2}$ m^2

18) The area of a room is $\frac{21}{4}$ m^2. If its breadth is $\frac{7}{2}$ meters, what is its length?

    a.   12m   c. 6 m

    b. $\frac{3}{2}$ m   d. 9 m

19) The product of two rational numbers is $\frac{2}{5}$. If one of the rational numbers is $\frac{1}{7}$, find the other

  rational number.

    a. $\frac{28}{15}$ c. $\frac{3}{7}$

    b. $\frac{14}{5}$ d. $\frac{2}{5}$

20) Samri can swim 115 meters in a minute, and Yisakor can swim 112.5 meters in a minute.

  How much farther can Samri swim than Yisakor?

    a. 2.2 mts   c. 1.7 mts

    b.   2.5 mts   d. 2.4 mts

21) The equation of the line passing through the point (3,4) and having slope 5 is

    a.   5x−y−11=0   c. 5x−y+11=0

    b.   5x+y+11=0   d. 5x+y−11=0

22) The equation of the line that passes through the points (3, 3) and (4, 5) is:

   a. $y = x + 3$ c. $y = 2x - 3$

   b. $x = 4$ d. $y = 3x$

23) Which of the following is the equation of a vertical line that passes through the point (6,1)?

       a. $x = 1$ c. $y = 6$

       b. $y = 1$ d. $x = 6$

24) How can you tell that the slope of a line is positive by looking at a graph?

   a. The line will rise from bottom left to top right

   b. The line will rise from top left to bottom right

   c. The line will be vertical

   d. The line will be horizontal

25) How can you tell that the slope of a line is negative from looking at a graph?

   a. The line will be fall from bottom left to top right

   b. The line will fall from top left to bottom right

   c. The line will be vertical

   d. The line will be horizontal

26) How can you tell if the slope of a line is zero?

      a. The line will rise from bottom left to top right

      b. The line will fall from top left to bottom right

      c. The line will be vertical

      d. The line will be horizontal

27) How can you tell if the slope of a line is undefined?

   a. The line will rise from bottom left to top right

   b. The line will fall from top left to bottom right

c. The line will be vertical

d. The line will be horizontal

28) What is the slope of the line represented by the equation y = 3x - 2?

    a. 3   c. -3

    b. -2   d. -2

29) What will be the cost of $\frac{7}{5}$ meters of cloth at $\frac{14}{4}$ Birr per meter.

    a. $\frac{98}{20}$ Br.   c. $\frac{28}{15}$ Br.

    b. $\frac{49}{10}$ Br.   d. a and b

30) A wood of length $\frac{143}{2}$ m has been cut into 26 pieces of equal length. What is the length of each piece?

    a. $\frac{11}{4}$ m   c. $\frac{3}{5}$ m

    b. $\frac{16}{5}$ m   d. $\frac{5}{7}$