

## Rational Number Worksheet - 1

1. If  $\frac{a}{b}$  is a rational number, then b is always a whole number. Mark true/ False
  - a) True
  - b) False
2. If  $c \neq 0$ , then the multiplicative inverse of  $\frac{c}{d}$  is  $\frac{d}{c}$ . Mark true/ false.
  - a) True
  - b) False
3. If  $\frac{m}{n}$  is a rational number, then m is not equal to zero. Mark True / False.
  - a) True
  - b) False
4. If  $\frac{t}{u}$  is a rational number, and u cannot be equal to 0. Mark True / False
  - a) True
  - b) False
5. The population of USA in 2005-06 is a rational number. Mark True / False.
  - a) True
  - b) False
6. If A and B are rational number then  $A - B = B - A$ . Mark True/False.
  - a) True
  - b) False
7. 0 is a rational number. Mark True/ False.
  - a) True
  - b) False
8. Closure property of rational number closed under Division. Mark True/ False.
  - a) True
  - b) False
9. Infinite rational numbers are present in between two rational numbers. Mark True/False
  - a) True
  - b) False
10. Multiplicative identity of rational number is 0. Mark True/ False.
  - a) True
  - b) False
11. Multiplicative inverse of a negative rational number is \_\_\_\_\_.
  - a) 0
  - b) A positive rational number
  - c) 1
  - d) A negative rational number
12. If 'r' is the reciprocal of rational number 's', then the reciprocal of 'r' will be \_\_\_\_\_.
  - a)  $s/r$
  - b) s
  - c)  $r/s$
  - d) r
13.  $(312 \times 521)^{-1} = (312)^{-1} \times$  \_\_\_\_\_.
  - a)  $\frac{1}{312}$
  - b) 521

c)  $\frac{1}{162,552}$

d)  $\frac{1}{521}$

14. Simplify  $\frac{31}{3} + \frac{21}{12} \times \frac{25}{11}$ .

a)  $\frac{45}{115}$

b) 152

c)  $11\frac{15}{12}$

d)  $14\frac{41}{132}$

15. By what rational number should  $\frac{-11}{12}$  be multiplied to get the product  $\frac{-11}{20}$ .

a)  $\frac{3}{5}$

b)  $\frac{2}{10}$

c)  $\frac{3}{12}$

d)  $\frac{5}{4}$

16. Divide the sum of  $\frac{-1}{7}$  and  $2\frac{3}{5}$  by their difference.

a)  $\frac{-3}{45}$

b)  $\frac{-8}{83}$

c)  $\frac{-5}{35}$

d)  $\frac{-6}{73}$

17. If  $\frac{2}{3}$  of a number exceeds its  $\frac{1}{5}$  by 35, find the number.

a) 105

b) 75

c) 80

d) 100

18. Sita walks  $1\frac{3}{5}$  km from a point B towards East and then from there  $2\frac{2}{5}$  km towards west. How far will she be now from B?

a)  $-\frac{4}{5}$  km

b)  $\frac{4}{5}$  km

c)  $\frac{15}{5}$  km

d)  $\frac{12}{25}$  km

19. Area of a rectangular park is  $8\frac{9}{20}$  sq. m. If the length of the park is  $3\frac{1}{4}$  m, find its breath.

a)  $3\frac{5}{7}$  m

b)  $2\frac{3}{5}$  m

c)  $\frac{5}{9}$  m

d)  $\frac{9}{20}$  m

20. Find the area of a square park whose one side is  $3\frac{4}{5}$  m long.

a)  $14\frac{11}{25}$

b)  $21\frac{3}{25}$

c)  $\frac{221}{25}$

d)  $\frac{521}{25}$