International Indian School Dammam

Work sheet for Maths Grade VII (2014-2015)

Lesson -9 Rational Numbers

Fill in the blanks.

1. A rational number where both numerator and denominator are positive integers is called a _____ rational number.
2. The number that is neither a positive or a negative rational number is _____.
3. There are _____number of rational numbers between two rational numbers.
4. $\frac{6}{7} \times \frac{-7}{5} =$ ___.
5. The additive inverse of $\frac{9}{11}$ is _____.
6. The product of a rational number with its reciprocal is always _____.

Do as directed.

7. Write four more numbers in the same pattern: $\frac{2}{5}, \frac{4}{10}, \frac{6}{15}, \frac{8}{20}$.
8. Is the number $\frac{3}{-8}$ rational?
9. Is it correct to say that all integers are rational numbers? Justify your answer with example.
10. All fractions are rational numbers. Is the converse true? Justify.
11. List 5 rational numbers between a) $\frac{-4}{7}$ and $\frac{-3}{8}$. b) -1 and 0
12. Reduce to the standard form:
    a) $\frac{-18}{45}$ b) $\frac{-3}{-15}$ c) $\frac{28}{56}$ d) $\frac{45}{99}$
13. Find three equivalent fractions each for a) $\frac{7}{8}$ b) $\frac{9}{11}$ c) $\frac{3}{5}$
14. Write the following in descending order. a) $-\frac{28}{56}, -\frac{2}{3}, \frac{3}{8}$ b) $-\frac{8}{5}, \frac{2}{6}, \frac{5}{7}$
15. Represent the following rational numbers on a number line. a) $\frac{2}{3}$, b) $-\frac{4}{3}$, c) $-\frac{8}{5}$
16. Write the additive inverse and multiplicative inverse of the following: a) $-\frac{2}{9}$, b) $\frac{8}{7}$, c) $-\frac{3}{11}$
17. Find the sum of a) $3\frac{8}{7} + \frac{2}{5}$ b) $-2\frac{1}{8} + -\frac{6}{10}$ c) $-\frac{7}{13} + (\frac{8}{15})$
18. Find a) $\frac{7}{24} - (\frac{2}{8})$ b) $(-4\frac{1}{9}) - 1\frac{2}{7}$ c) $8 - 2\frac{11}{14}$ d) $\frac{15}{12} - \frac{22}{15}$

19 Find the value of :

a) $-4 \div \frac{8}{7}$, b) $(-\frac{3}{5}) \div 7$, c) $(-\frac{8}{11}) \div \frac{16}{22}$, d) $\frac{3}{13} \div -\frac{9}{2}$

20 Find the product : a) $\frac{9}{2} \times -(\frac{8}{3})$, b) $(\frac{2}{-3}) \times (\frac{-3}{2})$, c) $\frac{7}{15} \times (\frac{9}{-28})$, d) $(\frac{-4}{9}) \times \frac{11}{12}$

21 The sum of two numbers is $-\frac{11}{12}$. One of them is $\frac{9}{2}$. Find the other.

22 The product of two numbers is $(-\frac{6}{7})$. One of them is $\frac{3}{4}$. Find the other.

23 Simplify : $5\frac{6}{7} + (-2\frac{1}{3}) + 1\frac{5}{6}$

24 Compare: a) $-3\frac{4}{7}$ and $-3\frac{1}{5}$ b) $-\frac{7}{5}$ and $-\frac{3}{5}$