INTERNATIONAL INDIAN SCHOOL, RIYADH

VI - VIII SECTION

CLASS: VIII

MATHEMATICS WORKSHEET

RATIONAL NUMBERS

1. Using appropriate properties find:
(a)
$$\left[-\frac{2}{3} \times \frac{3}{5} + \frac{5}{2} - \frac{3}{5}\right] =$$

(b)
$$\frac{2}{5} \times \left[\frac{-3}{7} + \left(\frac{-1}{6} \right) \right] =$$

2. Write the additive inverse of each of the following: (a) $\frac{2}{8}$ (b) $\frac{-5}{9}$ (c) $\frac{-6}{-5}$ (d) $\frac{2}{-9}$ (e) $\frac{19}{-6}$

(a)
$$\frac{2}{8}$$

(b)
$$\frac{-5}{9}$$

(c)
$$\frac{-6}{-5}$$

(d)
$$\frac{2}{-9}$$

(e)
$$\frac{19}{-6}$$

3. Verify that (-x) = x for

(a)
$$x = \frac{11}{15}$$

b)
$$x = \frac{10}{17}$$

(a)
$$-13$$
 (b) $\frac{-13}{12}$

(a)
$$\frac{-4}{5} \times 1 = 1 \times \frac{-4}{5}$$

(a)
$$\frac{-4}{5} \times 1 = 1 \times \frac{-4}{5} = \frac{-4}{5}$$

(b)
$$\frac{-13}{17} \times \frac{-2}{7} = \frac{-2}{7} \times \frac{-13}{17}$$

(c)
$$\frac{-19}{29}$$
 $\times \frac{29}{-19} = 1$

(a) $x = \frac{11}{15}$ (b) $x = \frac{-13}{17}$ 4. Find the multiplicative inverse of the following:

(a) -13 (b) $\frac{-13}{19}$ (c) $\frac{1}{5}$ (d) $\frac{-5}{8} \times \frac{-3}{7}$ (e) $-1 \times \frac{-2}{5}$ (f) -15. Name the property under multiplication used in each of the following:

(a) $\frac{-4}{5} \times 1 = 1 \times \frac{-4}{5}$ 5. Name the property under multiplication used in each of the following:

(a) $\frac{-4}{5} \times 1 = 1 \times \frac{-4}{5}$ (b) $\frac{-13}{17} \times \frac{-2}{7} = \frac{-2}{7} \times \frac{-13}{17}$ (c) $\frac{-19}{29} \times \frac{29}{-19} = 1$ 6. Multiply $\frac{6}{13}$ by the reciprocal of $\frac{-7}{16}$ 7. Tell what property allows you to compute $\frac{1}{5} \times \left[6 \times \frac{4}{5}\right]$ as $\left[\frac{1}{5} \times 6\right] \times \frac{4}{5}$ 7. Tell what property allows you to compute $\frac{1}{3} \times \left[6 \times \frac{4}{3}\right]$ as $\left[\frac{1}{3} \times 6\right] \times \frac{4}{3}$

8. Is $\frac{8}{9}$ the multiplicative inverse of -1 $\left[\frac{1}{8}\right]$? Why or why not? 9. Is 0.3 the multiplicative inverse of 3 $\left[\frac{1}{3}\right]$ Why or why not?

10. Write:

(a) The rational number that does not have a reciprocal.

(b) The rational numbers those which are equal to their reciprocals.

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