ZERO PERIOD
We Believe in Learning

1. Write the next three rational numbers to complete the patterns:

   (a) $\frac{4}{-5}, \frac{8}{-10}, \frac{12}{-15}, \frac{16}{-20}, \ldots \ldots \ldots \ldots$

   (b) $\frac{-8}{7}, \frac{-16}{14}, \frac{-24}{21}, \frac{-32}{28}, \ldots \ldots \ldots \ldots$

2. Give two rational numbers equivalent to:

   (a) $\frac{-4}{5}$ (b) $\frac{8}{11}$

3. Draw a number line and represent the following rational numbers on it:

   (a) $\frac{3}{5}$ (b) $\frac{-3}{8}$ (c) $\frac{9}{7}$

4. Represent the result of $\frac{-15}{16} + \frac{1}{2}$ on the number line.

5. Which of the following pairs represent the equivalent rational numbers?

   (a) $\frac{7}{12}$ and $\frac{28}{48}$ (b) $\frac{-2}{-3}$ and $\frac{-16}{24}$

6. List three rational numbers between:

   (a) $\frac{4}{5}$ and $\frac{5}{6}$ (b) $\frac{-4}{5}$ and $\frac{-2}{3}$

7. Write the additive inverse of:

   (a) $\frac{-1}{3}$ (b) $\frac{-9}{11}$ (c) $\frac{-7}{13}$ (d) $\frac{4}{17}$

8. Find the reciprocal of the following:

   (a) $\left(\frac{1}{2} \times \frac{1}{4}\right) + \left(\frac{1}{3} \times 6\right)$ (b) $\frac{30}{51} \times \frac{40}{28}$

9. Find the sum of:

   (a) $\frac{39}{4}$ and $\frac{30}{7}$ (b) $\frac{-22}{13}$ and $\frac{-21}{11}$

10. Find:

   (a) $\frac{29}{4} - \frac{40}{7}$ (b) $\frac{15}{13} - \left(\frac{-18}{26}\right)$

11. Find the product of:

   (a) $\frac{-4}{15}, \frac{-5}{12}$ and $\frac{1}{3}$ (b) $\frac{9}{14}, \frac{28}{27}$ and $\frac{-3}{81}$

12. Simplify:

   (a) $\frac{3}{7} \div \frac{21}{-55}$ (b) $\frac{29}{132} \div \frac{-29}{66}$

13. If $x = \frac{1}{20}$ and $y = \frac{-3}{8}$, then calculate:

   (a) $x + y$ (b) $x - y$ (c) $x \times y$ (d) $x \div y$

14. What should be added to $\frac{-7}{3}$ to get $\frac{5}{9}$?

15. Find the sum of reciprocal of -2 and -1.