1. Write the additive inverse of the following :

   (i) $\dfrac{-6}{-5}$ (ii) $\dfrac{2}{-7}$ (iii) $\dfrac{-5}{11}$

2. Find the multiplicative inverse of the following :

   (i) -17 (ii) $\dfrac{-12}{17}$ (iii) $\dfrac{-3}{8} \times \dfrac{-5}{2}$

3. Find five rational numbers between $-\dfrac{2}{5}$ and $\dfrac{1}{5}$.

4. Write three rational numbers greater than -3.

5. Prove that : $\left[-\dfrac{2}{3} - \left(\dfrac{4}{-5}\right)\right] - \dfrac{1}{2} = -\dfrac{11}{30}$.

6. Represent $\dfrac{5}{3}$ and $\dfrac{-5}{3}$ on the number line.

7. By what number should we multiply $-\dfrac{8}{13}$ to get the product 32?

8. Simplify using suitable property :

   $\dfrac{91}{41}\left(-\dfrac{2}{3}\right) + \left(\dfrac{4}{3}\right)\dfrac{91}{41} + \left(-\dfrac{2}{3}\right)\dfrac{91}{41}$

9. If $x = \dfrac{1}{7}, y = \dfrac{2}{3}$ and $z = \dfrac{-1}{3}$, verify that, $x \times (y + z) = (x \times y) + (x \times z)$.

10. From a cord of 16 m length, two pieces of length $3\dfrac{1}{3}$ m and $2\dfrac{2}{5}$ m are cut off. Find the length of remaining cord.

11. Evaluate : $\left|\dfrac{9}{7}\right| - \left|-\dfrac{2}{7}\right| + \dfrac{3}{7} - \left|\dfrac{4}{-7}\right|$

12. If $a = -\dfrac{3}{2}$ and $b = \dfrac{4}{5}$, verify that

    (i) $|a \times b| = |a| \times |b|$ (ii) $|a - b| \ge |a| - |b|$

13. If $\dfrac{4}{9} \div x = -\dfrac{10}{3}$, then find the value of x.

Fill in the blanks :

1. The equation $5x + 8 = 0$ is an example of .... equation.
2. The value of the variable, for which an equation is true is called the ....
   .... of the equation.
3. A number which when added to three times of itself gives 20 is ....
4. In a linear equation, the degree of variable is ....
5. A number when multiplied by 4 exceeds itself by 24. The number is ....
6. $0.4x + 0.5 = 0.3x + 0.6$, then x is ....
7. The sum of two numbers which are in the ratio 5 : 7 is 120.
   Then the numbers are .... and ....
8. If the value of x is 5, then $3x +$ .... $= 20$.
9. Two consecutive natural numbers whose sum is 55 are .... and ....
10. The general form of linear equation is $ax + b = c$, where $a \neq$ ....

![boy illustration] **REVIEW EXERCISE**

1. The sum of two numbers is 43. The difference is 13. Find the numbers.
2. The present ages of husband and wife are in the ratio 4 : 3. Thirty years later, the husband will
   $\_$ years older to her. What are their present ages?
3. The sum of three consecutive multiples of 3 is 333. Find the multiples.
4. Solve and verify your answer : $\dfrac{3}{2}(x+2)+4 = \dfrac{5x-4}{2}+\dfrac{5x}{4}$

5. Solve : $\dfrac{2x-(7-5x)}{9x-(3+4x)} = \dfrac{7}{6}$.

6. Solve for x : $\dfrac{3}{5x} - \dfrac{2}{3x} = \dfrac{1}{10}$.

7. Find the value of a, if
   $(a + 3)(a - 3) - a(a + 5) = 6$
8. Four-fifths of a number is 10 more than two-thirds of the number. Find the number.
9. Three consecutive integers add up to 54. What are the integers?
10. Solve the linear equation : $\dfrac{3x-2}{4} - \dfrac{2x+3}{3} = \dfrac{2}{3} - x$