Question 1.
Represent 3 / 2 and −3 / 4 on number lines.

Question 2.
Which of the following rational numbers is greater?
(i) 3 / 4, 1 / 2
(ii) −3 / 2, −3 / 4

Question 3.
Find the sum of

(i) $-4\dfrac{3}{4} + 2\dfrac{7}{12}$ (ii) $\dfrac{9}{-12} + \dfrac{5}{8}$

Question 4.
Subtract:

(i) $\dfrac{-5}{6}$ from $\dfrac{-7}{8}$ (ii) $2\dfrac{1}{5}$ from $-3\dfrac{1}{6}$

Question 5.
Find the product:

(i) $6\dfrac{2}{3} \times \left(-5\dfrac{1}{16}\right)$ (ii) $\left(-3\dfrac{1}{4}\right) \times \left(-2\dfrac{3}{4}\right)$

Question 6.
If the product of two rational numbers is $-9\dfrac{1}{6}$ and one of them is $-4\dfrac{1}{5}$, find the other number.

Question 7.
Arrange the following rational numbers in ascending order.

(i) $-\dfrac{1}{3}, \dfrac{-4}{3}, \dfrac{-2}{9}$ (ii) $-\dfrac{2}{3}, \dfrac{4}{5}, \dfrac{6}{7}, -\dfrac{1}{6}$

Question 8.
Insert five rational numbers between:

(i) $\dfrac{-2}{3}$ and -1 (ii) $-\dfrac{1}{2}$ and $\dfrac{-3}{2}$

Question 9.
Evaluate the following:

$\dfrac{-12}{-5} + \dfrac{7}{-3} + \dfrac{-5}{14} + \dfrac{22}{7}$

Question 10.
Subtract the sum of –5 / 6 and -8 / 5 from the sum 8 / 3 and -30 / 2.

Question 11.

Simplify: $\left(\dfrac{3}{7} \times \dfrac{-5}{8}\right) \div \left(\dfrac{1}{3} \times \dfrac{5}{6}\right) + \left|\dfrac{-1}{2} - \dfrac{1}{5}\right|$

Question 12.
During a festival sale, the cost of an object is Rsa 870 on which 20% is off. The same object is available at other shops for Rs 975 with a discount of 20 /3 %. Which is a better deal and by how much?

Question 13.
Simplify:
$21.5 \div 5 - \dfrac{1}{5}$ of $(20.5 - 5.5) + 0.5 \times 8.5$

Question 14.
Simplify:

$2.3 - [1.89 - \{3.6 - (2.7 - \overline{0.8 - 0.03})\}]$

Question 15.

If $x = \dfrac{-4}{9}, y = \dfrac{5}{12}$ and $z = \dfrac{7}{18}$, find the value of

$x \div y - \left[\dfrac{1}{xy} - y\left(\dfrac{2x}{y} \div \dfrac{x}{2y}\right) - xyz\left(\dfrac{1}{x} + \dfrac{1}{y} + \dfrac{1}{z}\right)\right].$

Question 16.
Reduce the following rational numbers in standard form.

(i) $\dfrac{35}{-15}$

(ii) $\dfrac{-36}{-216}$