



## NCERT SOLUTIONS FOR CLASS 6 MATHS FRACTIONS EXERCISE 7.5

### Exercise 7.5

#### Question 1:

Write these fractions appropriately as additions or subtractions:

(a)



(b)



(c)



Answer:

(a) Here, it can be observed that 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> rectangles are representing 1, 2, and 3 shaded parts out of 5 equal parts respectively. Clearly, the fraction represented by 3<sup>rd</sup> rectangle is the sum of the fractions represented by 1<sup>st</sup> and 2<sup>nd</sup> rectangles.

$$\frac{1}{5} + \frac{2}{5} = \frac{3}{5}$$

Hence,

(b) Here, it can be observed that 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> circles are representing 3, 2, and 1 shaded parts out of 5 equal parts respectively. Clearly, the fraction represented by 3<sup>rd</sup> circle is the difference between the fractions represented by 1<sup>st</sup> and 2<sup>nd</sup> circles.

$$\frac{3}{5} - \frac{2}{5} = \frac{1}{5}$$

Hence,

(c) Here, it can be observed that 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> rectangles are representing 2, 3, and 5 shaded parts out of 6 equal parts respectively. Clearly, the fraction represented by 3<sup>rd</sup> rectangle is the sum of the fractions represented by 1<sup>st</sup> and 2<sup>nd</sup> rectangles.

$$\text{Hence, } \frac{2}{6} + \frac{3}{6} = \frac{5}{6}$$

**Question 2:**

Solve:

$$(a) \frac{1}{18} + \frac{1}{18} \quad (b) \frac{8}{15} + \frac{3}{15}$$

$$(c) \frac{7}{7} - \frac{5}{7} \quad (d) \frac{1}{22} + \frac{21}{22}$$

$$(e) \frac{12}{15} - \frac{7}{15} \quad (f) \frac{5}{8} + \frac{3}{8}$$

$$(g) 1 - \frac{2}{3} \left( 1 = \frac{3}{3} \right) \quad (h) \frac{1}{4} + \frac{0}{4}$$

$$(i) 3 - \frac{12}{5}$$

Answer:

$$(a) \frac{1}{18} + \frac{1}{18} = \frac{1+1}{18} = \frac{2}{18} = \frac{1}{9}$$

$$(b) \frac{8}{15} + \frac{3}{15} = \frac{8+3}{15} = \frac{11}{15}$$

$$(c) \frac{7}{7} - \frac{5}{7} = \frac{7-5}{7} = \frac{2}{7}$$

$$(d) \frac{1}{22} + \frac{21}{22} = \frac{1+21}{22} = \frac{22}{22} = 1$$

$$(e) \frac{12}{15} - \frac{7}{15} = \frac{12-7}{15} = \frac{5}{15} = \frac{1}{3}$$

$$(f) \frac{5}{8} + \frac{3}{8} = \frac{5+3}{8} = \frac{8}{8} = 1$$

$$(g) 1 - \frac{2}{3} = \frac{3}{3} - \frac{2}{3} = \frac{3-2}{3} = \frac{1}{3}$$

$$(h) \frac{1}{4} + \frac{0}{4} = \frac{1+0}{4} = \frac{1}{4}$$

$$(i) 3 - \frac{12}{5} = \frac{15}{5} - \frac{12}{5} = \frac{15-12}{5} = \frac{3}{5}$$

**Question 3:**

Shubham painted  $\frac{2}{3}$  of the wall space in his room. His sister Madhavi helped and painted  $\frac{1}{3}$  of the wall space. How much did they paint together?

Answer:

$$\text{Space painted by Shubham} = \frac{2}{3} \text{ of the room}$$

$$\text{Space painted by Madhavi} = \frac{1}{3} \text{ of the room}$$

$$\text{Hence, together they painted} = \left( \frac{2}{3} + \frac{1}{3} \right) \text{ of the room}$$

= 1 = the complete wall

**Question 4:**

Fill in the missing fractions.

$$(a) \frac{7}{10} - \square = \frac{3}{10} \quad (b) \square - \frac{3}{21} = \frac{5}{21}$$

$$(c) \square - \frac{3}{6} = \frac{3}{6} \quad (d) \square + \frac{5}{27} = \frac{12}{27}$$

Answer:

$$(a) \frac{7}{10} - \square = \frac{3}{10}$$

$$\square = \frac{7}{10} - \frac{3}{10} = \frac{7-3}{10} = \frac{4}{10} = \frac{2}{5}$$

$$(b) \square - \frac{3}{21} = \frac{5}{21}$$

$$\square = \frac{5}{21} + \frac{3}{21} = \frac{5+3}{21} = \frac{8}{21}$$

$$(c) \square - \frac{3}{6} = \frac{3}{6}$$

$$\square = \frac{3}{6} + \frac{3}{6} = \frac{3+3}{6} = \frac{6}{6} = 1$$

$$(d) \square + \frac{5}{27} = \frac{12}{27}$$

$$\square = \frac{12}{27} - \frac{5}{27} = \frac{12-5}{27} = \frac{7}{27}$$

**Question 5:**

Javed was given  $\frac{5}{7}$  of a basket of oranges. What fraction of oranges was left in the basket?

Answer:

$$\text{Fractions given to Javed} = \frac{5}{7}$$

$$\text{Fraction left in the basket} = 1 - \frac{5}{7} = \frac{7}{7} - \frac{5}{7} = \frac{7-5}{7} = \frac{2}{7}$$

\*\*\*\*\* END \*\*\*\*\*