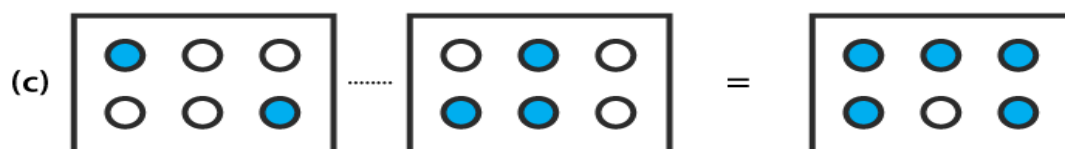**EXERCISE 7.5**   **PAGE NO: 157**

1. Write these fractions appropriately as additions or subtractions:

(a)

(b)

(c)

Solutions:
(a) Total number of parts each rectangle has = 5
No. of shaded parts in first rectangle = 1 i.e 1 / 5
No. of shaded parts in second rectangle = 2 i.e 2 / 5
No. of shaded parts in third rectangle = 3 i.e 3 / 5
Clearly, fraction represented by third rectangle = Sum of the fractions represented by first and second rectangle
Hence, 1 / 5 + 2 / 5 = 3 / 5
(b) Total number of parts each circle has = 5
     We may observe that first, second and third circles represent 5, 3 and 2 shaded parts out of 5
equal parts respectively. Clearly, fraction represented by third circle is the difference between the
fractions represented by first and second circles.
Hence, 5 / 5 – 3 / 5 = 2 / 5
(c) Here we may observe that first, second and third rectangles represents 2, 3 and 5 shaded parts out of
6 equal parts respectively. Clearly, fraction represented by third rectangle is the sum of fractions
represented by first and second rectangles.
Hence, 2 / 6 + 3 / 6 = 5 / 6

2. Solve:
(a) 1 / 18 + 1 / 18
(b) 8 / 15 + 3 / 15
(c) 7 / 7 – 5 / 7
(d) 1 / 22 + 21 / 22
(e) 12 / 15 – 7 / 15
(f) 5 / 8 + 3 / 8
(g) 1 – 2 / 3 (1 = 3 / 3)
(h) 1 / 4 + 0 / 4

(i) 3 – 12 / 5
Solutions:
(a) 1 / 18 + 1 / 18
= (1 + 1) / 18
= 2 / 18
= 1 / 9
(b) 8 / 15 + 3 / 15
= (8 + 3) / 15
= 11 / 15
(c) 7 / 7 – 5 / 7
= (7 – 5) / 7
= 2 / 7
(d) 1 / 22 + 21 / 22
= (1 + 21) / 22
= 22 / 22
= 1
(e) 12 /15 – 7 / 15
= (12 – 7) / 15
= 5 / 15
= 1 / 3
(f) 5 / 8 + 3 / 8
= (5 + 3) / 8
= 8 / 8
= 1
(g) 1 – 2 / 3
= 3 / 3 – 2 / 3
= (3 – 2) / 3
= 1 / 3
(h) 1 / 4 + 0
= 1/ 4
(i) 3 – 12 / 5
= 15 / 5 – 12/ 5
= (15 – 12) / 5
= 3 / 5

3. Shubham painted 2 / 3 of the wall space in his room. His sister Madhavi helped and painted 1 / 3 of the wall space. How much did they paint together?
Solutions:
Wall space painted by Shubham in a room = 2 / 3
Wall space painted by Madhavi in a room = 1 / 3
Total space painted by both = (2 / 3 + 1 / 3)
= (2 + 1) / 3
= 3 / 3
= 1
∴ Shubham and Madhavi together painted 1 complete wall in a room.

4. Fill in the missing fractions.
(a) 7 / 10 - ☐ = 3 / 10
(b) ☐ - 3 / 21 = 5 / 21
(c) ☐ - 3 / 6 = 3 / 6
(d) ☐ + 5 / 27 = 12 / 27
Solutions:
(a) Given 7 / 10 - ☐ = 3 / 10
           ☐ = 7 / 10 – 3 / 10
           ☐ = (7 – 3) / 10
           ☐ = 4 / 10
           ☐ = 2 / 5
(b) Given ☐ - 3 / 21 = 5 / 21
           ☐ = 5 / 21 + 3 / 21
           ☐ = (5 + 3) / 21
           ☐ = 8 / 21
(c) Given ☐ - 3 / 6 = 3 / 6
           ☐ = 3 / 6 + 3 / 6
           ☐ = (3 + 3) / 6
           ☐ = 6 / 6
           ☐ = 1
(d) Given ☐ + 5 / 27 = 12 / 27
           ☐ = 12 / 27 – 5 /27
           ☐ = (12 – 5) / 27
           ☐ = 7 /27

5. Javed was given 5 / 7 of a basket of oranges. What fraction of oranges was left in the basket?
Solutions:
Fraction of oranges given to Javed = 5 / 7
Fraction of oranges left in the basket = 1 – 5 / 7
       = 7 / 7 – 5 / 7
       = (7 – 5) / 7
       = 2 / 7