Access NCERT Solutions for Class 6 Chapter 2: Whole Numbers Exercise 2.2

1. Find the sum by suitable rearrangement:

(a) 837 + 208 + 363

(b) 1962 + 453 + 1538 + 647

Solutions:

(a) Given 837 + 208 + 363

= (837 + 363) + 208

= 1200 + 208

= 1408

(b) Given 1962 + 453 + 1538 + 647

= (1962 + 1538) + (453 + 647)

= 3500 + 1100

= 4600

2. Find the product by suitable rearrangement:

(a) 2 × 1768 × 50

(b) 4 × 166 × 25

(c) 8 × 291 × 125

(d) 625 × 279 × 16

(e) 285 × 5 × 60

(f) 125 × 40 × 8 × 25

Solutions:

(a) Given 2 **×** 1768 **×** 50

= 2 × 50 × 1768

= 100 × 1768

= 176800

(b) Given 4 × 166 × 25

= 4 × 25 × 166

= 100 × 166

= 16600

(c) Given 8 × 291 × 125

= 8 × 125 × 291

= 1000 × 291

= 291000

(d) Given 625 × 279 × 16

= 625 × 16 × 279

= 10000 × 279

= 2790000

(e) Given 285 × 5 × 60

= 285 × 300

= 85500

(f) Given 125 × 40 × 8 × 25

= 125 × 8 × 40 × 25

= 1000 × 1000

= 1000000

3. Find the value of the following:

(a) 297 × 17 + 297 × 3

(b) 54279 × 92 + 8 × 54279

(c) 81265 × 169 – 81265 × 69

(d) 3845 × 5 × 782 + 769 × 25 × 218

Solutions:

(a) Given 297 × 17 + 297 × 3

= 297 × (17 + 3)

= 297 × 20

= 5940

(b) Given 54279 × 92 + 8 × 54279

= 54279 × 92 + 54279 × 8

= 54279 × (92 + 8)

= 54279 × 100

= 5427900

(c) Given 81265 × 169 – 81265 × 69

= 81265 × (169 – 69)

= 81265 × 100

= 8126500

(d) Given 3845 × 5 × 782 + 769 × 25 × 218

= 3845 × 5 × 782 + 769 × 5 × 5 × 218

= 3845 × 5 × 782 + 3845 × 5 × 218

= 3845 × 5 × (782 + 218)

= 19225 × 1000

= 19225000

4. Find the product using suitable properties.

(a) 738 × 103

(b) 854 × 102

(c) 258 × 1008

(d) 1005 × 168

Solutions:

(a) Given 783 × 103

= 783 × (100 + 3)

= 783 × 100 + 783 × 3 (using distributive property)

= 78300 + 2214

= 76014

(b) Given 854 × 102

= 854 × (100 + 2)

= 854 × 100 + 854 × 2 (using distributive property)

= 85400 + 1708

= 87108

(c) Given 258 × 1008

= 258 × (1000 + 8)

= 258 × 1000 + 258 × 8 (using distributive property)

= 258000 + 2064

= 260064

(d) Given 1005 × 168

= (1000 + 5) × 168

= 1000 × 168 + 5 × 168 (using distributive property)

= 168000 + 840

= 168840

5. A taxidriver filled his car petrol tank with 40 litres of petrol on Monday. The next day, he filled the tank with 50 litres of petrol. If the petrol costs □ 44 per litre, how much did he spend in all on petrol?

Solutions:

Petrol quantity filled on Monday = 40 litres

Petrol quantity filled on Tuesday = 50 litres

Total petrol quantity filled = (40 + 50) litre

Cost of petrol per litre = □ 44

Total money spent = 44 × (40 + 50)

= 44 × 90

= □ 3960

6. A vendor supplies 32 litres of milk to a hotel in the morning and 68 litres of milk in the evening. If the milk costs □ 45 per litre, how much money is due to the vendor per day?

Solutions:

Milk quantity supplied in the morning = 32 litres

Milk quantity supplied in the evening = 68 litres

Cost of milk per litre = □ 45

Total cost of milk per day = 45 × (32 + 68)

= 45 × 100

= □ 4500

Hence, the money is due to the vendor per day is □ 4500

7. Match the following:

(i) 425 × 136 = 425 × (6 + 30 + 100) (a) Commutativity under multiplication.

(ii) 2 × 49 × 50 = 2 × 50 × 49 (b) Commutativity under addition.

(iii) 80 + 2005 + 20 = 80 + 20 + 2005 (c) Distributivity of multiplication over addition.

Solutions:

(i) 425 × 136 = 425 × (6 + 30 + 100) (c) Distributivity of multiplication over addition**.**

Hence (c) is the correct answer

(ii) 2 × 49 × 50 = 2 × 50 × 49 (a) Commutativity under multiplication

Hence, (a) is the correct answer

(iii) 80 + 2005 + 20 = 80 + 20 + 2005 (b) Commutativity under addition

Hence, (b) is the correct answer