

Exercise 2.2

# Q1. Find the sum by suitable rearrangement:

- (a) 837 + 208 + 363
- (b) 1962 + 453 + 1538 + 647

#### Ans:

- (a)837 + 208 + 363
- =(837+363)+208
- = 1200 + 208
- = 1408
- (b) 1962 + 453 + 1538 + 647
- =(1962+1538)+(453+647)
- = 3500 + 1100
- = 4600

# Q2. Find the product by suitable arrangement:

- (a) 2 x 1768 x 50
- (b) 4 x 166 x 25
- (c) 8 x 291 x 125
- (d) 625 x 279 x 16
- (e) 285 x 5 x 60
- (f) 125 x 40 x 8 x 25

#### Ans:

- (a) 2 x 1768 x 50
- = (2 x 50) x 1768
- = 100 x 1768
- = 176800

- (b) 4 x 166 x 25
- = (4 x 25) x 166
- = 100 x 166
- = 16600
- (c) 8 x 291 x 125
- = (8 x 125) x 291
- = 1000 x 291
- = 291000
- (d) 625 x 279 x 16
- = (625 x 16) x 279
- = 10000 x 279
- = 2790000
- (e) 285 x 5 x 60
- $= 284 \times (5 \times 60)$
- = 284 x 300
- = 85500
- (f) 125 x 40 x 8 x 25
- = (125 x 8) x (40 x 25)
- = 1000 X 1000
- = 1000000

# Q3. Find the value of the following:

- (a) 297 x 17 + 297 x 3
- (b) 54279 x 92 + 8 x 54279
- (c) 81265 x 169 81265 x 69

(d) 3845 x 5 x 782 + 769 x 25 x 218

### Ans:

$$= 297 \times (17 + 3)$$

$$= 54279 \times (92 + 8)$$

$$= 81265 \times (169 - 69)$$

(d) 
$$3845 \times 5 \times 782 + 769 \times 25 \times 218$$

$$= 3845 \times 5 \times 782 + 769 \times 5 \times 5 \times 218$$

$$= 3845 \times 5 \times 782 + 3845 \times 5 \times 218$$

$$= 3845 \times 5 \times (782 + 218)$$

# Q4. Find the product using suitable properties:

- (a) 738 x 103
- (b) 854 x 102
- (c) 258 x 1008
- (d) 1005 x 168

### Ans:

- (a) 738 x 103
- = 738 x (100 + 3)
- $= 738 \times 100 + 738 \times 3$
- = 73800 + 2214
- = 76014
- (b) 854 x 102
- $= 854 \times (100 + 2)$
- = 854 x 100 + 854 x 2
- = 85400 + 1708
- = 87108
- (c) 258 x 1008
- $= 258 \times (1000 + 8)$
- $= 258 \times 1000 + 258 \times 8$
- = 258000 + 2064
- = 260064
- (d) 1005 x 168
- $= (1000 + 5) \times 168$
- = 1000 x 168 + 5 x 168
- = 168000 + 840

Q5. A taxi-driver, filled his car petrol tank with 40 liters of petrol on Monday. The next day, he filled the tank with 50 liters of petrol. If the petrol costs `44 per liter, how much did he spend in all on petrol?

#### Ans:

Petrol filled on Monday = 40 liters
Petrol filled on next day = 50 liters
Total petrol filled = 90 liters
Now, Cost of 1 liter petrol = `44
Cost of 90 liters petrol = 44 x 90
= 44 x (100 - 10)
= 44 x 100 - 44 x 10
= 4400 - 440
= `3960

Therefore, he spent `3960 on petrol.

**Q6.** A vendor supplies 32 liters of milk to a hotel in a morning and 68 liters of milk in the evening. If the milk costs ` 15 per liter, how much money is due to the vendor per day?

#### Ans:

Supply of milk in morning = 32 liters Supply of milk in evening = 68 liters Total supply = 32 + 68 = 100 liters Now Cost of 1 liter milk =  $^15$ Cost of 100 liters milk =  $15 \times 100 = ^1500$ Therefore,  $^1500$  is due to the vendor per day.

# Q7. Match the following:

- (i) $425 \times 136 = 425 \times (6 + 30 + 100)$  (a) Commutativity under multiplication
- (ii)  $2 \times 48 \times 50 = 2 \times 50 \times 49$  (b) Commutativity under addition
- (iii) 80 + 2005 + 20 = 80 + 20 + 2005 (c) Distributivity multiplication under addition

#### Ans:

- (i)  $425 \times 136 = 425 \times (6 + 30 + 100)$  (c) Distributivity of multiplication over addition
- (ii)  $2 \times 49 \times 50 = 2 \times 50 \times 49$  (a) Commutivity under multiplication
- (iii) 80 + 2005 + 20 = 80 + 20 + 2005 (b) Commutivity under addition

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