EXERCISE 2(B) PAGE NO: 17

1.Estimate the sum of each pair of numbers to the nearest ten :
(i) 67 and 44
(ii) 34 and 87
(iii) 23 and 66
(iv) 78 and 18
(v) 96 and 55
Solution:
(i) 67 to the nearest ten is 70
44 to the nearest ten is 40
Sum of these numbers = 70 + 40
= 110
∴Required sum = 110
(ii) 34 to the nearest ten is 30
87 to the nearest ten is 90
Sum of these numbers = 30 + 90
= 120
∴Required sum = 120
(iii) 23 to the nearest ten is 20
66 to the nearest ten is 70
Sum of these numbers = 20 + 70
= 90
∴Required sum = 90
(iv) 78 to the nearest ten is 80
18 to the nearest ten is 20
Sum of these numbers = 80 + 20
= 100
∴Required sum = 100
(v) 96 to the nearest ten is 100
55 to the nearest ten is 60
Sum of these numbers = 100 + 60
= 160
∴Required sum = 160

2.Estimate the sum of each pair of numbers to the nearest hundred:
(i) 336 and 782
(ii) 546 and 342
(iii) 270 and 495
(iv) 4280 and 5295

(v) 4230 and 2410

Solution:

(i) 336 to the nearest hundred is 300 and 782 to the nearest hundred is 800
Sum of these numbers = (300 + 800)
= 1100
∴Required sum = 1100
(ii) 546 to the nearest hundred is 500 and 342 to the nearest hundred is 300
Sum of these numbers = (500 + 300)
= 800
∴Required sum = 800
(iii) 270 to the nearest hundred is 300 and 495 to the nearest hundred is 500
Sum of these numbers = (300 + 500)
= 800
∴Required sum = 800
(iv) 4280 to the nearest hundred is 4300 and 5295 to the nearest hundred is 5300
Sum of these numbers = (4300 + 5300)
= 9600
∴Required sum = 9600
(v) 4230 to the nearest hundred is 4200 and 2410 to the nearest hundred is 2400
Sum of these numbers = (4200 + 2400)
= 6600
∴Required sum = 6600

3.Estimate the sum of the following pair of numbers to the nearest thousand:

(i) 53826 and 36455

(ii) 56802 and 22475

Solution:

(i) 53826 to the nearest thousand is 54000
36455 to the nearest thousand is 36000
∴Required sum = 54000 + 36000
= 90000
(ii) 56802 to the nearest thousand is 57000
22475 to the nearest thousand is 22000
∴Required sum = 57000 + 22000
= 79000

4. Estimate the following differences correct to nearest ten :

(i) 82 – 27

(ii) 96 – 36

(iii) 508 – 248

Solution:

(i) 82 to the nearest ten is 80 and 27 to the nearest ten is 30

∴Required difference = (80 – 30)

= 50

(ii) 96 to the nearest ten is 100 and 36 to the nearest ten is 40

∴Required difference = (100 – 40)

= 60

(iii) 508 to the nearest ten is 510 and 248 to the nearest ten is 250

∴Required difference = (510 – 250)

= 260

5.Estimate each difference to the nearest hundred:

(i) 769 – 314

(ii) 856 – 687

(iii) 6352 – 2086

Solution:

(i) 769 to the nearest hundred = 800 and

314 to the nearest hundred = 300

∴Required difference = (800 – 300)

= 500

(ii) 856 to the nearest hundred = 900 and

687 to the nearest hundred = 700

∴Required difference = (900 – 700)

= 200

(iii) 6352 to the nearest hundred = 6400 and

2086 to the nearest hundred = 2100

∴Required difference = (6400 – 2100)

= 4300

6.Estimate each difference to the nearest thousand:

(i) 45974 – 38766

(ii) 76003 – 48399

Solution:

(i) 45974 to the nearest thousand = 46000

38766 to the nearest thousand = 39000

∴Required difference = (46000 – 39000)

= 7000

(ii) 76003 to the nearest thousand = 76000

48399 to the nearest thousand = 48000
∴Required difference = (76000 – 48000)
= 28000

7. Estimate each of the following products by rounding off each number to the nearest ten :
(i) 49 x 52
(ii) 63 x 38
(iii) 27 x 54
(iv) 53 x 85
(v) 74 x 67
Solution:
(i) 49 to the nearest ten = 50 and
52 to the nearest ten = 50
∴Required product = (50 × 50)
= 2500
(ii) 63 to the nearest ten = 60 and
38 to the nearest ten = 40
∴Required product = (60 × 40)
= 2400
(iii) 27 to the nearest ten = 30 and
54 to the nearest ten = 50
∴Required product = (30 × 50)
= 1500
(iv) 53 to the nearest ten = 50 and
85 to the nearest ten = 90
∴Required product = (50 × 90)
= 4500
(v) 74 to the nearest ten = 70 and
67 to the nearest ten = 70
∴Required product = (70 × 70)
= 4900

8. Estimate each of the following products by rounding off each number to the nearest hundred :
(i) 477 x 213
(ii) 624 x 236
(iii) 333 x 247
(iv) 537 x 283

(v) 382 x 127

Solution:

(i) 477 x 213

477 to the nearest hundred = 500 and

213 to the nearest hundred = 200

∴Required product = (500 × 200)

= 100000

(ii) 624 x 236

624 to the nearest hundred = 600 and

236 to the nearest hundred = 200

∴Required product = (600 × 200)

= 120000

(iii) 333 x 247

333 to the nearest hundred = 300 and

247 to the nearest hundred = 200

∴Required product = (300 × 200)

= 60000

(iv) 537 x 283

537 to the nearest hundred = 500 and

283 to the nearest hundred = 300

∴Required product = (500 × 300)

= 150000

(v) 382 x 127

382 to the nearest hundred = 400 and

127 to the nearest hundred = 100

∴Required product = (400 × 100)

= 40000

9. Estimate each of the following products by rounding off the first number correct to nearest ten and the other number correct to nearest hundred :

(i) 28 x 287

(ii) 432 x 128

(iii) 48 x 165

(iv) 72 x 258

(v) 83 x 664

Solution:

(i) 28 x 287

28 to the nearest ten = 30 and

287 to the nearest ten = 300

∴Required product = (30 × 300)
= 9000
(ii) 432 x 128
432 to the nearest ten = 430 and
128 to the nearest ten = 100
∴Required product = (430 × 100)
= 43000
(iii) 48 x 165
48 to the nearest ten = 50 and
165 to the nearest ten = 200
∴Required product = (50 × 200)
= 10000
(iv) 72 x 258
72 to the nearest ten = 70 and
258 to the nearest ten = 300
∴Required product = (70 × 300)
= 21000
(v) 83 x 664
83 to the nearest ten = 80 and
664 to the nearest ten = 700
∴Required product = (80 × 700)
= 56000

10. Estimate each of the following quotients by converting each number to the nearest ten:
(i) 87 ÷ 28
(ii) 84 ÷ 23
(iii) 77 ÷ 22
(iv) 198 ÷ 24
(v) 355 ÷ 26
Solution:
(i) 87 ÷ 28
87 ÷ 28 is approximately (to the nearest 10) equal to
90 ÷ 30 = 3
(ii) 84 ÷ 23
84 ÷ 23 is approximately (to the nearest 10) equal to
80 ÷ 20 = 4
(iii) 77 ÷ 22
77 ÷ 22 is approximately (to the nearest 10) equal to

80 ÷ 20 = 4
(iv) 198 ÷ 24
198 ÷ 24 is approximately (to the nearest 10) equal to
200 ÷ 20 = 10
(v) 355 ÷ 26
355 ÷ 26 is approximately (to the nearest 10) equal to
360 ÷ 30 = 12