Access NCERT Solutions for Class 6 Chapter 1: Knowing Our Numbers Exercise 1.3

1. Estimate each of the following using general rule:

(a) 730 + 998 (b) 796 – 314 (c) 12904 + 2888 (d) 28292 – 21496

Make ten more such examples of addition, subtraction and estimation of their outcome.

Solutions:

(a) 730 + 998

Round off to hundreds

730 is rounds off to 700

998 is rounds off to 1000

Hence, 730 + 998 = 700 + 1000 = 1700

(b) 796 – 314

Round off to hundreds

796 is rounds off to 800

314 is rounds off to 300

Hence, 796 – 314 = 800 – 300 = 500

(c) 12904 + 2888

Round off to thousands

12904 is rounds off to 13000

2888 is rounds off to 3000

Hence, 12904 + 2888 = 13000 + 3000 = 16000

(d) 28292 – 21496

Round off to thousands

28292 is round off to 28000

21496 is round off to 21000

Hence, 28292 – 21496 = 28000 – 21000 = 7000

Ten more such examples are

(i) 330 + 280 = 300 + 300 = 600

(ii) 3937 + 5990 = 4000 + 6000 = 10000

(iii) 6392 – 3772 = 6000 – 4000 = 2000

(iv) 5440 – 2972 = 5000 – 3000 = 2000

(v) 2175 + 1206 = 2000 + 1000 = 3000

(vi) 1110 – 1292 = 1000 – 1000 = 0

(vii) 910 + 575 = 900 + 600 = 1500

(viii) 6400 – 4900 = 6000 – 5000 = 1000

(ix) 3731 + 1300 = 4000 + 1000 = 5000

(x) 6485 – 4319 = 6000 – 4000 = 2000

2. Give a rough estimate (by rounding off to nearest hundreds) and also a closer estimate (by rounding off to nearest tens):

(a) 439 + 334 + 4317 (b) 108734 – 47599 (c) 8325 – 491 (d) 489348 – 48365

Make four more such examples.

Solutions:

(a) 439 + 334 + 4317

Rounding off to nearest hundreds

439 + 334 + 4317 = 400 + 300 + 4300

= 5000

Rounding off to nearest tens

439 + 334 + 4317 = 440 + 330 + 4320

= 5090

(b) 108734 – 47599

Rounding off to nearest hundreds

108734 – 47599 = 108700 – 47600

= 61100

Rounding off to nearest tens

108734 – 47599 = 108730 – 47600

= 61130

(c) 8325 – 491

Rounding off to nearest hundreds

8325 – 491 = 8300 – 500

= 7800

Rounding off to nearest tens

8325 – 491 = 8330 – 490

= 7840

(d) 489348 – 48365

Rounding off to nearest hundreds

489348 – 48365 = 489300 – 48400

= 440900

Rounding off to nearest tens

489348 – 48365 = 489350 – 48370

= 440980

Four more examples are as follows

(i) 4853 + 662

Rounding off to nearest hundreds

4853 + 662 = 4800 + 700

= 5500

Rounding off to nearest tens

4853 + 662 = 4850 + 660

= 5510

(ii) 775 – 390

Rounding off to nearest hundreds

775 – 390 = 800 – 400

= 400

Rounding off to nearest tens

775 – 390 = 780 – 400

380

(iii) 6375 – 2875

Rounding off to nearest hundreds

6375 – 2875 = 6400 – 2900

= 3500

Rounding off to nearest tens

6375 – 2875 = 6380 – 2880

3500

(iv) 8246 – 6312

Rounding off to nearest hundreds

8246 – 6312 = 8200 – 6300

1900

Rounding off to nearest tens

8246 – 6312 = 8240 – 6310

= 1930

3. Estimate the following products using general rule:

(a) 578 × 161

(b) 5281 × 3491

(c) 1291 × 592

(d) 9250 × 29

Make four more such examples.

Solutions:

(a) 578 × 161

Rounding off by general rule

598 and 161 rounded off to 600 and 200 respectively

600

× 200

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120000

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(b) 5281 × 3491

Rounding off by general rule

5281 and 3491 rounded off to 5000 and 3500 respectively

5000

× 3500

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17500000

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(c) 1291 × 592

Rounding off by general rule

1291 and 592 rounded off to 1300 and 600 respectively

1300

× 600

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780000

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(d) 9250 × 29

Rounding off by general rule

9250 and 29 rounded off to 9000 and 30 respectively

9000

× 30

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270000

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