



CLASS NOTES-ANSWERS

EXERCISE 1.3

1. Estimate each of the following using general rules:

(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

Answer:

(a) $730 + 998$

Nearest round off of 730 = 700

Nearest round off of 998 = 1000

Sum of $730 + 998 = 700 + 1000 = 1700$

(b) $796 - 314$

Nearest round off of 796 = 800

Nearest round off 314 = 300

Subtraction of $796 - 314 = 800 - 300 = 500$

(c) $12904 + 2888$

Nearest round off of 12904 = 13000

Nearest round off of 2888 = 3000

Sum of $12904 + 2888 = 13000 + 3000 = 16000$

(d) $28292 - 21496$



Nearest round off of 28292 = 28000

Nearest round off of 21496 = 21000

Subtraction of 28292 - 21496 = 28000 - 21000 = 7000

Ten more such examples are

(i) $435 + 282 = 400 + 300 = 700$

(ii) $3986 + 5870 = 4000 + 6000 = 10000$

(iii) $7392 - 4789 = 7000 - 5000 = 2000$

(iv) $5160 - 2792 = 5000 - 3000 = 2000$

(v) $2195 + 1306 = 2000 + 1000 = 3000$

(vi) $1180 - 1382 = 1000 - 1000 = 0$

(vii) $920 + 565 = 900 + 600 = 1500$

(viii) $6410 - 4860 = 6000 - 5000 = 1000$

(ix) $3841 + 1450 = 4000 + 1000 = 5000$

(x) $6375 - 4229 = 6000 - 4000 = 2000$

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.

Answer:



(a) $439 + 334 + 4317$

Round off of 439 to nearest hundreds = 400

Round off of 334 to nearest hundreds = 300

Round off of 4317 to nearest hundreds = 5000

Sum of $439 + 334 + 4317 = 400 + 300 + 4300 = 5000$

Rounding off to nearest tens:

Rounding off to nearest ten of 439 = 440

Rounding off to nearest ten of 334 = 330

Rounding off to nearest ten of 4317 = 4320

Sum of $(439 + 334 + 4317)$ to nearest ten = $440 + 330 + 4320 = 5090$

(b) $108734 - 47599$

Round off of 108734 to nearest hundreds = 108700

Round off of 47599 to nearest hundreds = 47600

Difference of $(108734 - 47599)$ to nearest hundreds = $108700 - 47600$
= 61100

Rounding off to nearest tens:

Rounding off to nearest ten of 108734 = 108730

Rounding off to nearest ten of 47599 = 47600

Rounding off to nearest ten of difference of $(108734 - 47599)$



$$= 108730 - 47600$$

$$= 61130$$

(c) $8325 - 491$

Round off to nearest hundreds is $(8325 - 491) = (8300 - 500) = 7800$

On rounding off to nearest tens we get $(8325 - 491) = 8330 - 490 = 784$

(d) $489348 - 48365$

Round off to nearest hundreds is $(489348 - 48365) = 489300 - 48400$

$$= 440900$$

On rounding off to nearest tens $(489348 - 48365) = 489350 - 48370$

$$= 440980$$

Four more examples are as follows:

(i) $4856 + 661$

Rounding off to nearest hundreds $4856 + 661 = 4800 + 700 = 5500$

Rounding off to nearest tens $4856 + 661 = 4850 + 660 = 5510$

(ii) $772 - 389$

Rounding off to nearest hundreds $772 - 389 = 800 - 400 = 400$

Rounding off to nearest tens $772 - 389 = 780 - 390 = 390$

(iii) $6365 - 2865$

Rounding off to nearest hundreds $6365 - 2865 = 6400 - 2900 = 3500$

Rounding off to nearest tens $6365 - 2865 = 6370 - 2870 = 3500$



(iv) $8245 - 6313$

Rounding off to nearest hundreds $8245 - 6313 = 8200 - 6300 = 1900$

Rounding off to nearest tens $8245 - 6313 = 8240 - 6310 = 1930$

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.

Answer:

(a) 578×161

578 and 161 can be rounded off to 600 and 200

On rounding off both the numbers, we get 600 and 200

$$600 \times 200 = 120000$$

(b) 5281×3491

5281 and 3491 can be rounded off to 5000 and 3500

On rounding off both the numbers, we get 5000 and 3500

$$5000 \times 3500 = 17500000$$

(c) 1291×592

1291 and 592 can be rounded off to 1300 and 600

On rounding off both the numbers, we get 1300 and 600

$$1300 \times 600 = 780000$$



(d) 9250×29

9250 and 29 can be rounded off to 9000 and 30

On rounding off both the numbers, we get 9000 and 30

$$9000 \times 30 = 270000$$

Examples:

1) 123×41 can be approximated as $120 \times 40 = 4800$

2) 395×38 can be approximated as $400 \times 40 = 16000$

3) 521×31 can be approximated as $500 \times 30 = 15000$

4) 1234×19 can be approximated as $1200 \times 20 = 24000$

