NCERT Solutions for Class 6 Maths Chapter 1 Knowing Our Numbers Exercise 1.1

Ex 1.1 Class 6 Maths Question 1.
Fill in the blanks:
(a) 1 lakh = …….. ten thousand.
(b) 1 million = …… hundred thousand.
(c) 1 crore = …… ten lakh.
(d) 1 crore = …… million.
(e) 1 million = …… lakh.
Solution:
(a) 1 lakh = ten ten thousand.
(b) 1 million = ten hundred thousand.
(c) 1 crore = ten ten lakh
(d) 1 crore = ten million
(e) 1 million = ten lakh

Ex 1.1 Class 6 Maths Question 2.
Place commas correctly and write the numerals:
(a) Seventy-three lakh seventy-five thousand three hundred seven.
(b) Nine crore five lakh forty-one.
(c) Seven crore fifty-two lakh twenty-one thousand three hundred two.
(d) Fifty-eight million four hundred twenty- three thousand two hundred two.
(e) Twenty-three lakh thirty thousand ten.
Solution:
(a) 73,75,307
(b) 9,05,00,041
(c) 7,52,21,302
(d) 5,84,23,202
(e) 23,30,010.

Ex 1.1 Class 6 Maths Question 3.
Insert commas suitably and write the names according to Indian System of Numeration:
(a) 87595762
(b) 8546283
(c) 99900046
(d) 98432701
Solution:
(a) 8,75,95,762 (Eight crore seventy-five lakh ninety-five thousand seven hundred sixty- two)
(b) 85,46,283 (Eighty-five lakh forty-six thousand two hundred eighty-three)
(c) 9,99,00,046 (Nine crore ninety-nine lakh forty-six)
(d) 9,84,32,701 (Nine crore eighty-four lakh thirty-two thousand seven hundred one)

Ex 1.1 Class 6 Maths Question 4.
Insert commas suitably and write the names according to International System of Numeration:
(a) 78921092
(b) 7452283
(c) 99985102
(d) 48049831
Solution:
(a) 78,921,092 (Seventy-eight million nine hundred twenty-one thousand ninety-two)
(b) 7,452,283 (Seven million four hundred fifty- two thousand two hundred eighty-three)
(c) 99,985,102 (Ninety-nine million nine hundred eighty-five thousand one hundred two)
(d) 48,049,831 (Forty-eight million forty-nine thousand eight hundred thirty-one)

NCERT Solutions for Class 6 Maths Chapter 1 Knowing Our Numbers Ex 1.2

Exercise 1.2

Ex 1.2 Class 6 Maths Question 1.
A book exhibition was held for four days in a school. The number of tickets sold at the counter on the first, second, third and final day was respectively 1094, 1812, 2050 and 2751. Find the total number of tickets sold on all the four days.
Solution:
Number of tickets sold on the first day = 1094
Number of tickets sold on the second day = 1812
Number of tickets sold on the third day = 2050
Number of tickets sold on the final day = 2751
∴ Total number of tickets sold on all the four days = 1094 + 1812 + 2050 + 2751 = 7,707.

Ex 1.2 Class 6 Maths Question 2.
Shekhar is a famous cricket player. He has so far scored 6980 runs in test matches. He wishes to complete 10,000 runs. How many more

runs does he need?
Solution:
Shekhar has so far scored 6980 runs
He wishes to complete 10,000 runs.
Therefore total number of runs needed by him = 10,000 – 6980 = 3020 runs

Ex 1.2 Class 6 Maths Question 3.
In an election, the successful candidate registered 5,77,500 votes and his nearest rival secured 3,48,700 votes. By what margin did the successful candidate win the election?
Solution:
Number of votes secured by the successful candidate = 5,77,500
Number of votes secured by his nearest rival = 3,48,700
Therefore, margin of votes to win the election = 5,77,500 – 3,48,700 = 2,28,800

Ex 1.2 Class 6 Maths Question 4.
Kirti bookstore sold books worth ₹2,85,891 in the first week of June and books worth ₹4,00,768 in the second week of the month. How much was the sale for the two weeks together? In which week was the sale greater and by how much?
Solution:
Books sold in first week of June worth ₹2,85,891
Books sold in second week of the month worth ₹4,00,768
Therefore, total sale of books in the two weeks together
= ₹2,85,891 + ₹4,00,768 = ₹6,86,659
In the second week of the month, the sale of books was greater.
Difference of the sale of books
= ₹4,00,768 – ₹2,85,891 = ₹1,14,877
Hence, in second week of june, the sale of books was more by ₹1,14,877.

Ex 1.2 Class 6 Maths Question 5.
Find the difference between the greatest and the least numbers that can be written using the digits 6, 2, 7, 4, 3 each only once.
Solution:
Given digits are 6, 2, 7, 4, 3
Greatest number = 76432
Least number = 23467
Therefore, difference = 76432 – 23467 = 52,965

Ex 1.2 Class 6 Maths Question 6.
A machine, on an average, manufactures 2,825 screws a day. How many screws did it produce in the month of January, 2006?
Solution:
Number of screws manufactured in a day = 2,825.
Number of screws manufactured in month of January = 31 x 2825 = 87,575

Ex 1.2 Class 6 Maths Question 7.
A merchant had ₹78,592 with her. She placed an order for purchasing 40 radio sets at ₹1200 each. How much money will remain with her after the purchase?
Solution:
Amount of money with the merchant = ₹78,592
Number of radio sets = 40
Price of one radio set = ₹1200
Therefore, cost of 40 radio sets = ₹1200 x 40 = ₹48,000
Remaining money with the merchant = ₹78,592 – ₹48000 = ₹30,592
Hence, amount of ₹30,592 will remain with her after purchasing the radio sets.

Ex 1.2 Class 6 Maths Question 8.
A student multiplied 7236 by 65 instead of multiplying by 56. By how much was his answer greater than the correct answer?
Solution:
Student has multiplied 7236 by 65 instead of multiplying by 56.
Difference between the two multiplications = (65 – 56) x 7236 = 9 x 7236 = 65124
(We don't need to do both the multiplied)
Hence, the answer greater than the correct answer is 65,124.

Ex 1.2 Class 6 Maths Question 9.
To stitch a shirt, 2 m 15 cm cloth is needed. Out of 40 m cloth, how many shirts can be stitched and how much cloth will remain?

$$
\begin{array}{r|l}
215 & 40000 \\
 & 215 \\
\hline
 & 1850 \\
 & 1720 \\
\hline
 & 130
\end{array}
\quad 18
$$

Solution:

Total length of the cloth = 40 m = 40 x 100 cm = 4000 cm.
Cloth needed to stitch a shirt = 2 m 15 cm = 2 x 100 + 15 cm = 215 cm
Therefore, number of shirts stitched = $\frac{4000}{215}$
So, the number of shirts stitched = 18 and the remaining cloth = 130 cm = 1 m 30 cm

Ex 1.2 Class 6 Maths Question 10.
Medicine is packed in boxes, each weighing 4 kg 500 g. How many such boxes can be loaded in a van which cannot carry beyond 800 kg?

```
4500 ) 800000 ( 177
       4500
       -----
       35000
       31500
       -----
         35000
         31500
         -----
          3500
```

Solution:
Weight of one box = 4 kg 500 g = 4 x 1000 + 500 = 4500 g
and 800 kg = 800 x 1000 = 800000 g
Therefore, 177 boxes can only be loaded in the van.

Ex 1.2 Class 6 Maths Question 11.
The distance between the school and the house of a student is 1 km 875 m. Everyday she walks both ways. Find the total distance covered by her in six days.
Solution:
Distance between school and house = 1 km 875 m = (1000 + 875) m = 1875 m.
Distance travelled by the student in both ways = 2 x 1875 = 3750 m
Distance travelled in 6 days = 3750 m x 6 – 22500 m = 22 km 500 m.
Hence, total distance covered in six days = 22 km 500 m.

Ex 1.2 Class 6 Maths Question 12.
A vessel has 4 litres and 500 ml of curd. In how many glasses, each of 25 mL capacity, can it be filled? –
Solution:
Quantity of curd in a vessel = 4 1 500 mL = (4 x 1000 + 500) mL = 4500 mL.
Capacity of 1 glass = 25 mL
Therefore number of glasses = $\frac{4500}{25}$ = 180

NCERT Solutions for Class 6 Maths Chapter 1 Knowing Our Numbers Ex 1.3

Exercise 1.3

Ex 1.3 Class 6 Maths Question 1.
Estimate each of the following using general rule:
(a) 730 + 998
(b) 796 – 314
(c) 12,904 + 2,888
(d) 28,292 – 21,496
Make ten more such examples of addition, subtraction and estimation of their outcome.
Solution:
(a) 730 + 998
Rounding off 730 nearest to hundreds = 700
Rounding off 998 nearest to hundreds = 1,000
∴ 730 + 998 = 700 + 1000 = 1700

(b) 796 – 314
Rounding off 796 nearest to hundreds = 800
Rounding off 314 nearest to hundreds = 300
∴ 796 – 314 = 800 – 300 = 500

(c) 12,904 + 2,888
Rounding off 12,904 nearest to thousands = 13000
Rounding off 2888 nearest to thousands = 3000
∴ 12,904 + 2,888 = 13000 + 3000 = 16000

(d) 28,292 – 21,496
Rounding off 28,292 nearest to thousands = 28,000
Rounding off 21,496 nearest to thousands = 21,000
∴ 28,292 – 21,496 = 28,000 – 21,000 = 7,000

Example 1: 1210 + 2365 = 1200 + 2400 = 3600
Example 2: 3853 + 6524 = 4000 + 7000 = 11,000
Example 3: 8752 – 3654 = 9,000 – 4,000 = 5,000
Example 4: 4538 – 2965 = 5,000 – 3,000 = 2,000
Example 5: 1927 + 3185 = 2000 + 3,000 = 5,000
Example 6: 3258 – 1698 = 3000 – 2000 = 1,000
Example 7: 8735 + 6232 = 9000 + 6000 = 15,000
Example 8: 1038 – 1028 = 1000 – 1000 = 0
Example 9: 6352 + 5830 = 6,000 + 6,000 = 12,000
Example 10: 9854 – 6385 = 10,000 – 6000 = 4,000

Ex 1.3 Class 6 Maths Question 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 + 4,317
(b) 1,08,734-47,599
(c) 8,325-491
(d) 4,89,348-48,365
Make four such examples:
Solution:
(a)439 + 334 + 4,317
(i) Rough estimate (Rounding off to nearest hundreds)
439 + 334 + 4,317 = 400 + 300 + 4300 = 5,000
(ii) Closer estimate (Rounding off to nearest tens)
439 + 334 + 4317 = 440 + 330 + 4320 = 5090.

(b) 1,08,734 – 47,599
(i) Rough estimate (Rounding off to nearest hundreds)
1,08,734 – 47,599 = 1,08,700 – 47,600 = 61,100
(ii) Closer estimate (Rounding off to nearest tens)
1,08,734 – 47,599 = 1,08,730 – 47,600 = 61,130.

(c) 8325 – 491
(i) Rough estimate (Rounding off to nearest hundreds)
8325 – 491 = 8300 – 500 = 7800
(ii) Closer estimate (Rounding off to nearest tens)
8325 – 491 = 8330 – 490 = 7840.

(d) 4,89,348 – 48,365
(i) Rough estimate (Rounding off to nearest hundreds)
4,89,348 – 48,365 = 4,89,300 – 48,400 = 4,40,900
(ii) Closer estimate (Rounding off to nearest tens)
4,89,348 – 48,365 = 4,89,350 – 48,370 = 4,40,980

Example 1:
384 + 562
Solution:
(i) Rough estimate (Rounding off to nearest hundreds)
384 + 562 = 400 + 600
= 1,000
(ii) Closer estimate (Rounding off to nearest tens)
384 + 562 = 380 + 560
= 940

Example 2:
8765 – 3820
Solution:
(i) Rough estimate (Rounding off to nearest hundreds)
8765 – 3820 = 8800 – 3900
= 4900
(ii) Closer estimate (Rounding off to nearest tens)
8765 – 3820 = 8770 – 3820
= 4950

Example 3:
6653 – 8265
Solution:
(i) Rough estimate (Rounding off to nearest hundreds)
6653 + 8265 = 6700 + 8300
= 15,000

(ii) Closer estimate (Rounding off to nearest tens)
6653 + 8265 = 6650 + 8270
= 14920

Example 4:
3826 – 1262
Solution:
(i) Rough estimate (Rounding off to nearest hundreds)
3826 – 1262 = 3800 – 1300
= 2500
(ii) Closer estimate (Rounding off to nearest tens)
3826 – 1262 = 3830 – 1260
= 2570

Ex 1.3 Class 6 Maths Question 3.
Estimate the following products using general rule:
(a) 578 x 161
(b)5281 x 3491
(c) 1291 x 592
(d) 9250 x 29
Make four more such examples.
Solution:
(a) 578 x 161 = 600 x 200 = 1,20,000
(b) 5281 x 3491 = 5000 x 3000 = 1,50,00,000
(c) 1291 x 592 = 1300 x 600 = 7,80,000
(d) 9250 x 29 = 9000 x 30 = 2,70,000

Example 1.
382 x 1062
Solution:
382 x 1062 = 400 x 1000 = 4,00,000

Example 2.
6821 x 1291
Solution:
6821 x 1291 = 7000 x 1000 = 70,00,000

Example 3.
3858 x 9350
Solution:
3858 x 9350 = 4000 x 9000 = 3,60,00,000

Example 4.
3405 x 7502
Solution:
3405 x 7502 = 3000 x 8000 = 2,40,00,000