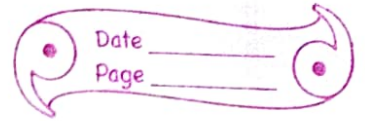


Sarvika Class - 6

Section - 'C' School no. 6149
Worksheet



Estimation

1. Round off to the nearest ten :-

(i) $453 = 450$

(ii) $7926 = 7930$

(iii) $24712 = 24710$

2. Round off to the nearest hundreds :-

(i) $847 = 800$

(ii) $4972 = 5000$

(iii) $62253 = 62300$

3. Round off to the nearest thousand :-

(i) $4507 = 5000$

(ii) $18297 = 18000$

(iii) $25716 = 26000$

4. Estimate the product and verify by actual calculations :-

(a) 38×7

~~38~~ Round off to the nearest tens $38 = 40$

Round off to the nearest tens $7 = 10$

$40 \times 10 = 400$

Actual calculation :-

$$\begin{array}{r} 38 \\ \times 7 \\ \hline 266 \end{array}$$

(b) 45×67

45 Round off to the nearest tens = 50

67 Round off to the nearest tens = 70

$$\begin{array}{r} 70 \\ \times 50 \\ \hline 35,00 \end{array}$$

Actual calculations :-

$$\begin{array}{r} 67 \\ \times 45 \\ \hline 3015 \end{array}$$

(c) 225×8

225 Round off to the nearest tens = 230

8 Round off to the nearest tens = 10

$$\begin{array}{r} 230 \\ \times 10 \\ \hline 23,00 \end{array}$$

Actual calculations :-

$$\begin{array}{r} 225 \\ \times 8 \\ \hline 1800 \end{array}$$

(d) 48×73

48 Round off to the nearest tens = 50

73 Round off to the nearest tens = 70

$$\begin{array}{r} 70 \\ \times 50 \\ \hline 35,00 \end{array}$$

Actual calculations :-

$$\begin{array}{r} 73 \\ \times 48 \\ \hline 35,04 \end{array}$$

(e) 602×45

45 Round off to the nearest tens = 50

602 Round off to the nearest tens = 600

$$\begin{array}{r} 600 \\ \times 50 \\ \hline 30,000 \end{array}$$

Actual calculations :-

$$\begin{array}{r} 602 \\ \times 45 \\ \hline 27,090 \end{array}$$

5. Choose the best estimate from the possible answers given :-

(a) $3 \times 52 = 160$ (120, 150, 180)

(b) $7 \times 31 = 217$ (210, 250, 280)

(c) $2 \times 698 = 1396$ (1000, 1200, 1400)

(d) $2 \times 88 = 176$ (150, 180, 200)

6. Estimate the sums by rounding off to the nearest thousands.

(i) $7789 - 569$

7789 Round off to the nearest thousands = 8000

569 Round off to the nearest thousands = 1000

$$\begin{array}{r} 8000 \\ - 1000 \\ \hline 7000 \end{array}$$

Required difference = $8000 - 1000$

(ii) $8976 + 4356$

8976 Round off to the nearest thousands = 9000

4356 Round off to the nearest thousands = 4000

$$\begin{array}{r} 9000 \\ + 4000 \\ \hline 13,000 \end{array}$$

Required sum = $9000 + 4000$

(ii) 5463×768

$$\begin{array}{r}
 5463 \text{ Round off to nearest thousands} = \underline{5000} \\
 768 \text{ Round off to nearest thousands} = \underline{1000} \\
 \hline
 \begin{array}{r}
 5000 \\
 \times 1000 \\
 \hline
 5,000,000
 \end{array}
 \end{array}$$

Required multiplication = 5000×1000

7. Estimate each of the following using general rule:-

(a) $730 + 998$

$$\begin{array}{r}
 730 \text{ Round off to the nearest hundreds} = \underline{700} \\
 998 \text{ Round off to the nearest hundreds} = \underline{1000} \\
 \hline
 \begin{array}{r}
 1000 \\
 + 700 \\
 \hline
 1700
 \end{array}
 \end{array}$$

Required addition = $1000 + 700 = \underline{1700}$

(b) $796 - 314$

$$\begin{array}{r}
 796 \text{ Round off to the nearest hundreds} = \underline{800} \\
 314 \text{ Round off to the nearest hundreds} = \underline{300} \\
 \hline
 \begin{array}{r}
 800 \\
 - 300 \\
 \hline
 500
 \end{array}
 \end{array}$$

Required difference = $800 - 300 = \underline{500}$

(c) $12,904 + 2,888$

$12,904$ Round off to the nearest thousands = 13000
 $2,888$ Round off to the nearest thousands = 3000

Required addition = $13000 + 3000$

13000
+ 3000
<hr style="border-top: 1px solid black;"/>
<u>16000</u>

(d) $28,292 - 21,496$

$28,292$ Round off to the nearest ten thousands = $30,000$
 $21,496$ Round off to the nearest ten thousands = $20,000$

Required difference = $30,000 - 20,000 = 10,000$

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

(a) $439 + 334 + 4,317$

4317
439
+ 334
<hr style="border-top: 1px solid black;"/>
<u>5080</u>

Answers = Hundreds = 5100

Tens = 5080

(b) $1,08,734 - 47,599$

$$\begin{array}{r} 1\ 08\ 734 \\ -\ 47\ 599 \\ \hline 61,135 \end{array}$$

Answer = 61,135 = hundreds = 61,100
Tens = 61,140

(c) $8325 - 491$

$$\begin{array}{r} 8325 \\ -\ 491 \\ \hline 7,834 \end{array}$$

Answer = 7,834 = hundreds = 7,800
Tens = 7,830

(d) $4,89,348 - 48,365$

$$\begin{array}{r} 4,89,348 \\ -\ 48,365 \\ \hline 4,40,983 \end{array}$$

Answer = 4,40,983 = hundreds = 4,40,500
Tens = 4,40,430

9. Estimate the following products using general rule :-

(a) 578×161

$$\begin{array}{r} 578 \\ \times 161 \\ \hline 578 \\ 3468 \\ + 578 \\ \hline 93,058 \end{array}$$

Answers = 93,058 = hundreds = 93,100
Thousands = 93,000
Tens thousands = 93,000

(b) 5281×3491

$$\begin{array}{r}
 5281 \\
 \times 3491 \\
 \hline
 5281 \\
 47529 \\
 22124 \\
 + 15843 \\
 \hline
 1,84,35,971
 \end{array}$$

Answers = Dundreds = 1,84,36,000

Thousands = 1,84,40,000

Ten Thousands = 1,84,40,000

Lakhs = 1,84,00,000

(c) 1291×592

$$\begin{array}{r}
 1291 \\
 \times 592 \\
 \hline
 2582 \\
 11669 \\
 + 6455 \\
 \hline
 7,64,272
 \end{array}$$

Answers = Dundreds = 7,64,300

Thousands = 7,64,000

Ten Thousands = 7,60,000

Lakhs = 7,70,000

10. Find the largest number formed by the digits 4, 3, 0, 9, rounded off to the nearest thousand.

$4309 = 4000$

Answers = 4000

11. There are about 310 passengers in each car of the city train. As there are 8 cars for each train, there are about 2,400 passengers on each train.

a. 240 b. 2,400 c. 2,004

$$\begin{array}{r} 310 \\ \times 8 \\ \hline 2480 \end{array}$$

12. The first bus had 96 passengers and the second bus had 107 ~~pass~~ passengers. There are about 200 passengers in total.

a. 100 b. 150 c. 200

$$\begin{array}{r} 107 \\ + 96 \\ \hline 203 \end{array}$$

13. In the morning, there are about 492 planes taking off from the airport and 107 of the planes are delayed for more than 15 minutes. About 330 planes take off within 15 minutes of the scheduled time.

a. 450 b. 130 c. 330

14. The distance between two bus terminals is 390 km. It takes the bus 4 hours to go from one terminal to another. The speed of the bus is about 100 km per hour.

Ans: a. 100 b. 10 c. 386

15. In a city, there are 45,960 electric cars and 96,113 gas cars. There are about 50,000 more gas cars than electric cars.

Ans: a. 5,000 b. 50,000 c. 5,100

16. List all the numbers which can be rounded off to 30.

Ans: 25, 26, 27, 28, 29, 30, 31, 32, 33, 34

17. List all the numbers which can be rounded off to 50.

Ans: 45, 46, 47, 48, 49, 50, 51, 52, 53, 54

18. Write the smallest and the largest numbers which are rounded

Ans: Smallest = 85 Largest = 94

19. Write the smallest and the largest numbers which are rounded off to 130

Ans: Smallest = 125 Largest = 134