

$$\text{Thus, } 36,863 - 26,473 \rightarrow 37,000 - 26,000 = 11,000$$

$$\therefore \text{Estimated difference} = \underline{11,000 \text{ Ans}}$$

$$(3) 45,363 - 37,205$$

Solution:

Rounding off to nearest thousands, we have:

$$45,363 \rightarrow 45,000 \text{ [As } 3 < 5 \Rightarrow 363 \rightarrow 000 \Rightarrow 5363 \rightarrow 5000 \text{]}$$

$$37,205 \rightarrow 37,000 \text{ [As } 2 < 5 \Rightarrow 205 \rightarrow 000 \Rightarrow 7205 \rightarrow 7000 \text{]}$$

$$\text{Thus, } 45,363 - 37,205 \rightarrow 45,000 - 37,000 = 8000$$

$$\therefore \text{Estimated difference} = \underline{8000 \text{ Ans}}$$

Q.F. Estimate each of the following products by rounding off each number to the nearest tens:

$$(1) 37 \times 62$$

Solution:

Rounding off to nearest tens, we have

$$37 \rightarrow 40 \text{ [As } 7 > 5 \Rightarrow 7 \rightarrow 10 \Rightarrow 37 \rightarrow 40 \text{]}$$

$$62 \rightarrow 60 \text{ [As } 2 < 5 \Rightarrow 2 \rightarrow 0 \Rightarrow 62 \rightarrow 60 \text{]}$$

$$\text{Thus, } 37 \times 62 \rightarrow 40 \times 60 = 2400$$

$$\therefore \text{Estimated product} = \underline{2400 \text{ Ans}}$$

$$(3) 27 \times 62$$

Solution:

Rounding off to nearest tens, we have

$$27 \rightarrow 30 \text{ [As } 7 > 5 \Rightarrow 7 \rightarrow 10 \Rightarrow 27 \rightarrow 30 \text{]}$$

$$62 \rightarrow 60 \text{ [As } 2 < 5 \Rightarrow 2 \rightarrow 0 \Rightarrow 62 \rightarrow 60 \text{]}$$

$$\text{Thus, } 27 \times 62 \rightarrow 30 \times 60 = 1800$$

$$\therefore \text{Estimated product} = \underline{1800 \text{ Ans}}$$

$$(5) 63 \times 59$$

Solution:

Rounding off to nearest tens, we have

$$63 \rightarrow 60 \text{ [As } 3 < 5 \Rightarrow 3 \rightarrow 0 \Rightarrow 63 \rightarrow 60]$$

$$59 \rightarrow 60 \text{ [As } 9 > 5 \Rightarrow 9 \rightarrow 10 \Rightarrow 59 \rightarrow 60]$$

$$\text{Thus, } 63 \times 59 \Rightarrow 60 \times 60 = 3600$$

$$\therefore \text{Estimated product} = 3600 \text{ Ans}$$

Q.6. Estimate each of the following products by rounding off each number to the nearest hundreds:

(1) 377×129

Solution:

Rounding off to nearest hundreds, we have

$$377 \rightarrow 400 \text{ [As } 7 > 5 \Rightarrow 77 \rightarrow 100 \Rightarrow 377 \rightarrow 400]$$

$$129 \rightarrow 100 \text{ [As } 2 < 5 \Rightarrow 29 \rightarrow 00 \Rightarrow 129 \rightarrow 100]$$

$$\text{Thus, } 377 \times 129 \rightarrow 400 \times 100 = 40,000$$

$$\therefore \text{Estimated product} = 40,000 \text{ Ans}$$

(3) 424×168

Solution:

Rounding off to nearest hundreds, we have

$$424 \rightarrow 400 \text{ [As } 2 < 5 \Rightarrow 24 \rightarrow 00 \Rightarrow 424 \rightarrow 400]$$

$$168 \rightarrow 200 \text{ [As } 6 > 5 \Rightarrow 68 \rightarrow 100 \Rightarrow 168 \rightarrow 200]$$

$$\text{Thus, } 424 \times 168 \rightarrow 400 \times 200 = 80,000$$

$$\therefore \text{Estimated product} = 80,000 \text{ Ans}$$

(5) 395×135

Solution:

Rounding off to nearest hundreds, we have

$$395 \rightarrow 400 \text{ [As } 9 > 5 \Rightarrow 95 \rightarrow 100 \Rightarrow 395 \rightarrow 400]$$

$$135 \rightarrow 100 \text{ [As } 3 < 5 \Rightarrow 35 \rightarrow 00 \Rightarrow 135 \rightarrow 100]$$

$$\text{Thus, } 395 \times 135 \rightarrow 400 \times 100 = 40,000$$

$$\therefore \text{Estimated product} = 40,000 \text{ Ans}$$

Q.H. Estimate each of the following products by rounding off each number to nearest tens:

(1) 184×153

Solution:

Rounding off to nearest tens, we have

$$184 \rightarrow 180 \text{ [As } 4 < 5 \Rightarrow 4 \rightarrow 0 \Rightarrow 84 \rightarrow 80 \text{]}$$

$$153 \rightarrow 150 \text{ [As } 3 < 5 \Rightarrow 3 \rightarrow 0 \Rightarrow 53 \rightarrow 50 \text{]}$$

$$\text{Thus, } 184 \times 153 \rightarrow 180 \times 150 = 27,000$$

\therefore Estimated product = 27,000 Ans.

(3) 363×73

Solution:

Rounding off to nearest tens, we have

$$363 \rightarrow 360 \text{ [As } 3 < 5 \Rightarrow 3 \rightarrow 0 \Rightarrow 63 \rightarrow 60 \text{]}$$

$$73 \rightarrow 70 \text{ [As } 3 < 5 \Rightarrow 3 \rightarrow 0 \Rightarrow 73 \rightarrow 70 \text{]}$$

$$\text{Thus, } 363 \times 73 \rightarrow 360 \times 70 = 25,200$$

\therefore Estimated product = 25,200 Ans.

(5) 685×144

Solution:

Rounding off to nearest tens, we have

$$685 \rightarrow 690 \text{ [As } 5 = 5 \Rightarrow 5 \rightarrow 10 \Rightarrow 85 \rightarrow 90 \text{]}$$

$$144 \rightarrow 140 \text{ [As } 4 < 5 \Rightarrow 4 \rightarrow 0 \Rightarrow 44 \rightarrow 40 \text{]}$$

$$\text{Thus, } 685 \times 144 \rightarrow 690 \times 140 = 96,600$$

\therefore Estimated product = 96,600 Ans.

Q.I Round off each 2-digit number to the nearest tens and each 3-digit number to the nearest hundreds and then find the estimated quotient for each of the following:

Q.I. (1) $86 \div 29$

Solution:

Rounding off to nearest tens, we have

$$86 \rightarrow 90 \text{ [As } 6 > 5 \Rightarrow 6 \rightarrow 10 \Rightarrow 86 \rightarrow 90]$$

$$29 \rightarrow 30 \text{ [As } 9 > 5 \Rightarrow 9 \rightarrow 10 \Rightarrow 29 \rightarrow 30]$$

$$\text{Thus, } 86 \div 29 \rightarrow 90 \div 30 = 3$$

\therefore Estimated quotient = 3 Ans

(3) $76 \div 18$

Solution:

Rounding off to nearest tens, we have

$$76 \rightarrow 80 \text{ [As } 6 > 5 \Rightarrow 6 \rightarrow 10, \Rightarrow 76 \rightarrow 80]$$

$$18 \rightarrow 20 \text{ [As } 8 > 5 \Rightarrow 8 \rightarrow 10 \Rightarrow 18 \rightarrow 20]$$

$$\text{Thus, } 76 \div 18 \rightarrow 80 \div 20 = 4$$

\therefore Estimated quotient = 4 Ans

(5) $726 \div 22$

Solution:

$$726 \rightarrow 700 \text{ [Rounding off to nearest hundreds]}$$

$$22 \rightarrow 20 \text{ [Rounding off to nearest tens]}$$

$$\text{Thus, } 726 \div 22 \rightarrow 700 \div 20 = 35$$

\therefore Estimated quotient = 35 Ans

(7) $632 \div 32$

Solution:

$$632 \rightarrow 600 \text{ [Rounding off to nearest hundreds]}$$

$$32 \rightarrow 30 \text{ [Rounding off to nearest tens]}$$

$$\text{Thus, } 632 \div 32 \rightarrow 600 \div 30 = 20$$

\therefore Estimated quotient = 20 Ans

Q.E. Simplify:

$$\begin{aligned}
 (1) \quad & 80 \div 40 \times 20 + 750 \div 150 - 6 \\
 & = 2 \times 20 + 5 - 6 \\
 & = 40 + 5 - 6 \\
 & = 45 - 6 \\
 & = \underline{39 \text{ Ans}}
 \end{aligned}$$

$$\begin{aligned}
 (2) \quad & 78 - 15 \div 3 + 45 \div 15 \times 10 + 4 \\
 & = 78 - 5 + 3 \times 10 + 4 \\
 & = 78 - 5 + 30 + 4 \\
 & = 78 + 30 + 4 - 5 \\
 & = 112 - 5 \\
 & = \underline{107 \text{ Ans}}
 \end{aligned}$$

Q.F. Answer the following questions: (Word Problems)

(1) Solution:

| | | |
|---|---|-----------|
| a) No. of toys produced by the toy company in the year 2014 | = | 25,35,067 |
|---|---|-----------|

| | | |
|---|---|-----------|
| b) No. of toys produced by the toy company in the year 2015 = 25,35,067 + 12,40,7 | = | 25,47,474 |
|---|---|-----------|

| | | |
|--|---|-----------|
| c) No. of toys produced by the toy company in the year 2016 = 25,47,474 + 24,545 | = | 25,72,019 |
|--|---|-----------|

| | | |
|---|-----------|-----|
| d) Total no. of toys produced by the toy company in these three years = | 76,54,560 | Ans |
|---|-----------|-----|

e) Hence, the toy company produced 76,54,560 toys in three years.

Q.2. Solution:

(4) (10) (7) (9) (10)

a) Population of Andhra Pradesh = 6,65,08,008

b) Population of Madhya Pradesh = 6,61,81,170

(-)

c) Andhra Pradesh is more populated by = 3,26,838 Ans.

d) Hence, Andhra Pradesh is more populated than Madhya Pradesh.

Q.3. Solution: by 3,26,838

(4) (9) (9) (10) (8) (9) (13) (13)

a) Sum of two numbers = 5,00,29,043

b) One number = 3,62,51,947

(-)

c) The other number = 1,37,77,096

d) Ans: 1,37,77,096 must be added to 3,62,51,947 to get 5,00,29,043.

Q.4. Solution:

Step-I

a) ∴ 1 year = 365 days

b) ∴ 3 years = 365 x 3 = 1095 days

Step-II

c) ∴ No. of pencils a factory can produce in 1 day = 3540

d) ∴ No. of pencils it will produce in 3 years i.e. in 1095 days = 3540 x 1095 = 38,76,300 Ans.

$$\begin{array}{r}
 3540 \\
 \times 1095 \\
 \hline
 17700 \\
 318600 \\
 000000 \\
 + 3540000 \\
 \hline
 3876300
 \end{array}$$

e) Hence, the factory will produce 38,76,300 pencils in 3 years.

Q.5. Solution:

a) Total no. of apples = 20,42,042

b) No. of apples in 1 carton = 362

c) No. of cartons = $20,42,042 \div 362$
= 5641 Ans

$$\begin{array}{r} 5641 \\ 362 \overline{) 20,42,042} \\ \underline{-1810} \\ 2320 \\ \underline{-2172} \\ 1484 \\ \underline{-1448} \\ 362 \\ \underline{-362} \\ 0 \end{array}$$

d) Hence, 5641 cartons were there.

* THE END *

NOTE: PLEASE WRITE DOWN THE SOLUTIONS IN MATHS COPY.