

NEW ERA PUBLIC SCHOOL (2021)

(1)

Subject: Mathematics "A" Class: 4th

Topic: Multiplying a 2-Digit Number by a 2-Digit Number.

Exercise: - 25
Solved Assignment of term 1st 2021

Qno. 1: - Multiply.

a $27 \times 50 =$

Sol: -
$$\begin{array}{r} 27 \\ \times 50 \\ \hline 1350 \end{array}$$

b.c, $69 \times 80 =$

Sol,
$$\begin{array}{r} 69 \\ \times 80 \\ \hline 5520 \end{array}$$

d.e, $39 \times 40 =$

Sol,
$$\begin{array}{r} 39 \\ \times 40 \\ \hline 1560 \end{array}$$

Qg, $64 \times 70 =$

Sol,
$$\begin{array}{r} 64 \\ \times 70 \\ \hline 4480 \end{array}$$

Qi, $78 \times 30 =$

Sol,
$$\begin{array}{r} 78 \\ \times 30 \\ \hline 2340 \end{array}$$

Qno. 2: - Multiply in your notebook.

Qa, 21×37

Sol,
$$\begin{array}{r} 21 \\ \times 37 \\ \hline 147 \\ 63 \times \\ \hline 777 \end{array}$$

Qc, 72×64

Sol,
$$\begin{array}{r} 72 \\ \times 64 \\ \hline 288 \\ 432 \times \\ \hline 4608 \end{array}$$

Qe, 29×31

Sol,
$$\begin{array}{r} 29 \\ \times 31 \\ \hline 29 \\ 87 \times \\ \hline 899 \end{array}$$

Qg, 63×58

Sol,
$$\begin{array}{r} 63 \\ \times 58 \\ \hline 504 \\ 315 \times \end{array}$$

Qi, 91×19

Sol,
$$\begin{array}{r} 91 \\ \times 19 \\ \hline 819 \\ 91 \times \end{array}$$

Qk, 14×41

Sol,
$$\begin{array}{r} 14 \\ \times 41 \\ \hline 14 \\ 56 \times \end{array}$$

(P.T.O.)

3654

1729

574.

Qm, 24×74

Qo, 87×57

sol, 24

sol, 87

$\times 74$

$\times 57$

96

609

$168 \times$

$435 \times$

1776

4959

Topic:- Multiplying a 3-digit number by a 2-digit number.

Exercise:- 27

Multiply in your notebook.

sol1:- 245

sol3:- 604

sol5:- 254

$\times 28$

$\times 15$

$\times 16$

1960

3020

1524

$490 \times$

$604 \times$

$254 \times$

6860

9060

4064

sol7:- 212

sol9:- 208

sol11:- 880

$\times 22$

$\times 62$

$\times 62$

424

416

1760

$424 \times$

$1248 \times$

$5280 \times$

4664

12896

54560

Topic:- Multiplying a 3-digit number by a 3-digit number.

Exercise:- 28

Qno.1:- Multiply in your notebook.

sol a, 318

sol c, 371

sol e, 786

$\times 152$

$\times 168$

$\times 431$

(P.T.O.)

636

2968

786

1590X

2226X

2358X

318XX371XX3144XX4833662328338766

Solg:- 243

sol i:- 465

X123X654

729

1860

486X

2325X243XX2790XX29889304110

Qno.2:- Multiply in your notebook.

Sola:- 700

solc:- 786

Sole:- 202

X123X123X303

2100

2358

606

1400X

1572X

000X

700XX786XX606XX861009667861206

Solg:- 483

sol i:- 374

sol k:- 374

X666X800X888

2898

000

2992

2898X

000X

2992X

2898XX2992XX2992XX321678299200332112

Solm:- 483

sol O:- 404

X600X505

000

2020

000X

000X

(P.T.O.)

2898XX

289800

2020XX

204020

Q no. 3:- In an orchard, each apple tree gives 358 apples. How many apples are there on 106 trees?

Sol:- Number of apples on a tree = 358.
 $\therefore$ Total number of apples on 106 trees =

$$\begin{array}{r} 358 \\ \times 106 \\ \hline 2148 \\ 000X \\ \hline 358XX \\ \hline 37948 \end{array}$$

Q no. 4:- Find the cost of 102 transistors if each transistor costs Rs 406.

Sol:- cost of a transistor = Rs 406.
 $\therefore$ Total cost of 102 transistors =

$$\begin{array}{r} \text{Rs } 406 \\ \times 102 \\ \hline 812 \\ 000X \\ \hline 406XX \\ \hline \text{Rs } 41412 \end{array}$$

Exercise:- 29

Multiply in your notebook.

Sol 1:- 723X101 Sol 3:- 552X220

723

000

$$\begin{array}{r} 000x \\ 723xx \\ \hline 73023 \end{array}$$

$$\text{Sol 5:- } \begin{array}{r} 911x211 \\ 911 \end{array}$$

$$911x$$

$$\begin{array}{r} 1822xx \\ \hline 192221 \end{array}$$

$$\text{Sol 9:- } \begin{array}{r} 465x654 \\ 1860 \end{array}$$

$$2325x$$

$$\begin{array}{r} 2790xx \\ \hline 304110 \end{array}$$

$$\begin{array}{r} 1104x \\ 1104xx \\ \hline 121440 \end{array}$$

$$\text{Sol 7:- } \begin{array}{r} 888x333 \\ 2664 \end{array}$$

$$2664x$$

$$2664xx$$

$$\begin{array}{r} 295704 \\ \hline 295704 \end{array}$$

$$\text{Sol 11:- } \begin{array}{r} 282x821 \\ 282 \end{array}$$

$$564x$$

$$2256xx$$

$$\begin{array}{r} 231522 \\ \hline 231522 \end{array}$$

$$\text{Exercise:- 30}$$

Solve the following problems.

Qno. 1:- A fuel truck made 27 trips in a year. It carried 6132 gallons petrol in each trip. How many gallons petrol did it carry that year?

Sol:- A fuel Truck made trips in a year = 27

Number of petrol gallons in a trip = 6132.

∴ Total number of petrol gallons carried that year = 6132

$$\begin{array}{r} 6132 \\ \times 27 \\ \hline 42924 \\ 12264x \\ \hline 165564 \end{array}$$

(P.T.O.)

Qno.2:- Each bag contains 119 marbles. There are 39 such bags. How many marbles are there in all?

Sol:- Number of marbles in a bag = 119

∴ Total number of marbles in 39 bags = 119

$$\begin{array}{r} \times 39 \\ 1071 \\ 357 \times \\ \hline 4641 \end{array}$$

Qno.3:- A machine can produce 371 parts per day. How many parts can it produce in 365 days?

Sol:- A machine produced parts per day = 371

∴ Total parts produced in 365 days = 371

$$\begin{array}{r} \times 365 \\ 1855 \\ 2226 \times \\ 1113 \times \times \\ \hline 135415 \end{array}$$

Qno.4:- Each of 835 workers worked 42 hours in a week. How many hours did they work in all in the week?

Sol:- A worker worked in a week = 42 hours.

Number of workers = 835.

∴ Total number of hours they worked all in the week = 835

$$\begin{array}{r} \times 42 \\ 1670 \\ 3340 \times \end{array}$$

(P.T.O.)

35070

(7)

Q.no.5:- A machine can produce 101 nuts per day.
How many nuts can it produce in 2 years?

Sol:- A machine produced nuts per day = 101
 $\therefore$ Total number of nuts produced in 2 years =
1 year = 365 days. 2 years = $365 \times 2 = 730$ days.

101

$\times 730$

000

303X

707XX

73730

Q.no.6:- The air distance between the two cities is 723 kilometres. What distance will a plane cover in making 115 such one-way trips?

Sol:- The air distance between two cities = 723 km.

$\therefore$ Total distance covered in 115 one way trips =

723

$\times 115$

3615

723X

723XX

83145 km.

Q.no.7:- How many hours are there in a decade (ten years)?

Sol:- Number of hours in a day = 24.

Number of days in a year = 365.

Number of days in ten years = $365 \times$
(P.T.O.)

$$10 = 3650$$

$10 = 3650$
 $\therefore$ Number of hours in a decade = 3650×24

x24

14600

7300X

87600

Q.no.8:- There are 496 groundnuts in one sack.
How many groundnuts will 13 such sacks contain?

Groundnuts in a sack = 496.

Sol:- Number of groundnuts in a sack = 496
Number of groundnuts in 13 sacks = 496

Sol:- Number of groundnuts in 1 sack = 38
 $\therefore$ Total number of groundnuts in 13 sacks = 496
 $\times 13$

X 13

1488

496X

6448

Q.no.9:- There are 9624 letters in one book.

How many letters will 91 such books have?

Sol: - Number of letters in a book = 9624.

$\therefore$ Total number of letters in 91 books = 9624

891

9624

86616X

875784

Q.no.10:- There are 1 lakh bacteria in the area of one square millimetre. How many bacteria will be there in the area of 8 square millimetre?

Sol:- Bacteria in the area of 1 square mm = 100000

$\therefore$ Total bacteria in the area of 8 square mm =

(P.T.O.)

100000

X 8

800000

Q.no.11:- There are 2009 mangoes in one sack. How many mangoes are there in 21 such sacks?

Sol:- Number of mangoes in a sack = 2009

∴ Total number of mangoes in 21 sacks = 2009

X 21

2009

401842189

Q.no.12:- There are 1107 employees in a company. Each employee works 8 hours per day. Find the total number of hours they work in all per day.

Sol:- Number of employees in a company = 1107

Each employee worked per day = 8 hours.

∴ Total number of hours they worked in all per day = 1107

X 88856

Q.no.13:- Mr. Sam drives 1818 metres everyday. How many metres will he drive in 236 days? Time?

Sol:- Mr. Sam drives everyday = 1818 m.

∴ Total metres he drives in 236 days = 1818

X 236

10908

5454X

3636xx

429048

Topic:- Estimation of the product of Two numbers
Exercise:- 31

Q.no.1:- Round the numbers to the nearest ten and estimate their product.

sol a:- 66×9

$66 \rightarrow 70$

$9 \rightarrow 10$

70×10

700

sol c, 25×28

$25 \rightarrow 30$

$28 \rightarrow 30$

30×30

900

sol e, 42×57

$42 \rightarrow 40$

$57 \rightarrow 60$

40×60

2400

sol g:- 26×81

$26 \rightarrow 30$

$81 \rightarrow 80$

30×80

2400

sol i, 46×21

$46 \rightarrow 50$

$21 \rightarrow 20$

50×20

1000

sol k, 48×12

$48 \rightarrow 50$

$12 \rightarrow 10$

50×10

500

sol m, 31×8

$31 \rightarrow 30$

$8 \rightarrow 10$

30×10

300

sol o, 88×18

$88 \rightarrow 90$

$18 \rightarrow 20$

90×20

1800

sol q, 66×18

$66 \rightarrow 70$

$18 \rightarrow 20$

70×20

1400

sol s, 91×88

$91 \rightarrow 90$

$88 \rightarrow 90$

90×90

8100

Q.no.2:- Round the numbers to the nearest hundred and estimate their product.

sol a, 523×348

$523 \rightarrow 500$

$348 \rightarrow 300$

500×300

sol c, 216×705

$216 \rightarrow 200$

$705 \rightarrow 700$

200×700

sol e, 742×282

$742 \rightarrow 700$

$282 \rightarrow 300$

700×300

<u>150000</u>	<u>140000</u>	<u>210000</u>
solg, 836×438	solis, 212×308	solh, 618×114
$836 \rightarrow 800$	$212 \rightarrow 200$	$618 \rightarrow 600$
$438 \rightarrow 400$	$308 \rightarrow 300$	$114 \rightarrow 100$
<u>800×400</u>	<u>200×300</u>	<u>600×100</u>
<u>320000</u>	<u>60000</u>	<u>60000</u>
sol o, 421×219	solq, 148×443	sol s, 424×112
$421 \rightarrow 400$	$148 \rightarrow 100$	$424 \rightarrow 400$
$219 \rightarrow 200$	$443 \rightarrow 400$	$112 \rightarrow 100$
<u>400×200</u>	<u>100×400</u>	<u>400×100</u>
<u>80000</u>	<u>40000</u>	<u>40000</u>

Q.no-3:- Estimate the product of two numbers by rounding to the nearest ten.

sol a, 245×611	solc, 124×541	sole, 353×352
$245 \rightarrow 250$	$124 \rightarrow 120$	$353 \rightarrow 350$
$611 \rightarrow 610$	$541 \rightarrow 540$	$352 \rightarrow 350$
<u>250×610</u>	<u>120×540</u>	<u>350×350</u>
000	000	1000
250 X	480 X	1750 X
<u>1500 XX</u>	<u>600 XX</u>	<u>1050 XX</u>
<u>152500</u>	<u>64800</u>	<u>122500</u>

solg:- 171×441	solis, 329×922	solh, 346×675
$171 \rightarrow 170$	$329 \rightarrow 330$	$346 \rightarrow 350$
$441 \rightarrow 440$	$922 \rightarrow 920$	$675 \rightarrow 680$
<u>170×440</u>	<u>330×920</u>	<u>350×680</u>
000	000	000
680 X	660 X	2800 X

680XX2970XX2100XX74800303600238000soln:- 244×383 sol, 772×245 solq:- 232×336 $244 \rightarrow 240$ $772 \rightarrow 770$ $232 \rightarrow 230$ $383 \rightarrow 380$ $245 \rightarrow 250$ $336 \rightarrow 340$ 240×380 770×250 230×340

000

000

000

1920X

3850X

920X

720XX1540XX690XX9120019250078200Topic:- Some useful multiplication tipsExercise:- 32

Multiply with the help of useful tips given above.

sol a:- 29×31 sol b, 32×11 sol c, 39×41 $= 30 \times 30 = 900$ $= 342 = 5$ $= 40 \times 40 = 1600$ $= 900 - 1 = 899$ so, $32 \times 11 = 352$ $= 1600 - 1 = 1599$ so, $29 \times 31 = 899$ sol e:- 49×51 so, $39 \times 41 = 1599$ sol d:- 63×11 $= 50 \times 50 = 2500$ sol f:- 41×11 $= 6 + 3 = 9$ $= 2500 - 1 = 2499$ $= 4 + 1 = 5$ so, $63 \times 11 = 693$ $\therefore 49 \times 51 = 2499$ $\therefore 41 \times 11 = 451$ sol g:- 59×61 sol h:- 52×11 $= 60 \times 60 = 3600$ $= 5 + 2 = 7$ $= 3600 - 1 = 3599$ $\therefore 52 \times 11 = 572$ $\therefore 59 \times 61 = 3599$ Topic:-DivisionExercise:- 34

Divide.

$$\text{sol1:- } 2 \overline{) 840} \mid 420$$

$$\underline{8}$$

$$4$$

$$\underline{4}$$

$$0$$

$$0$$

$$\text{sol3:- } 5 \overline{) 555} \mid 111$$

$$\underline{5}$$

$$5$$

$$\underline{5}$$

$$5$$

$$\underline{5}$$

$$\text{sol5:- } 3 \overline{) 333} \mid 111$$

$$\underline{3}$$

$$3$$

$$\underline{3}$$

$$3$$

$$\underline{3}$$

$$\text{sol7:- } 5 \overline{) 200} \mid 40$$

$$\underline{20}$$

$$0$$

$$\underline{0}$$

$$\text{sol2:- } 3 \overline{) 309} \mid 103$$

$$\underline{3}$$

$$09$$

$$\underline{9}$$

$$\text{sol4:- } 3 \overline{) 699} \mid 233$$

$$\underline{6}$$

$$9$$

$$\underline{9}$$

$$9$$

$$\underline{9}$$

$$\text{sol6:- } 4 \overline{) 420} \mid 105$$

$$\underline{4}$$

$$20$$

$$\underline{20}$$

$$\text{sol8:- } 2 \overline{) 900} \mid 450$$

$$\underline{8}$$

$$10$$

$$\underline{10}$$

$$0$$

$$\underline{0}$$

Exercise:- 35

Divide to find the quotient and the remainder.
(P.T.O)

$$\text{sol 1:- } 5 \overline{)23} 4$$

$$\underline{20}$$

$$3$$

$$\text{Quotient} = 4$$

$$\text{Remainder} = 3$$

$$\text{sol 2:- } 7 \overline{)48} 6$$

$$\underline{42}$$

$$6$$

$$\text{Quotient} = 6$$

$$\text{Remainder} = 6$$

$$\text{sol 3:- } 4 \overline{)66} 16$$

$$\underline{4}$$

$$26$$

$$\underline{24}$$

$$2$$

$$Q = 16, R = 2.$$

$$\text{sol 5:- } 4 \overline{)103} 25$$

$$\underline{8}$$

$$23$$

$$\underline{20}$$

$$3$$

$$Q = 25, R = 3.$$

$$\text{sol 7:- } 7 \overline{)345} 49$$

$$\underline{28}$$

$$65$$

$$\underline{63}$$

$$2$$

$$Q = 49, R = 2.$$

$$Q = 42, R = 2.$$

$$\text{sol 8:- } 6 \overline{)505} 84$$

$$\underline{48}$$

$$25$$

$$\underline{24}$$

$$1$$

$$Q = 84, R = 1.$$

Exercise:- 36

Divide.

$$\text{sol 1:- } 6 \overline{)420} 70$$

$$\underline{42}$$

$$\text{sol 2:- } 5 \overline{)580} 116$$

$$\underline{5}$$

(P.T.O)

0

$$Q = 70, R = 0$$

8

5

30

30

$$Q = 116, R = 0.$$

$$\text{sol 3:- } 3 \overline{)930} \mid 310$$

9

3

3

0

$$Q = 310, R = 0.$$

$$\text{sol 4:- } 7 \overline{)318} \mid 45$$

28

38

35

3

$$Q = 45, R = 3.$$

$$\text{sol 5:- } 8 \overline{)721} \mid 90$$

72

1

$$Q = 90, R = 1.$$

$$\text{sol 6:- } 8 \overline{)231} \mid 28$$

16

71

64

7

$$Q = 28, R = 7.$$

$$\text{sol 7:- } 9 \overline{)637} \mid 70$$

63

7

$$Q = 70, R = 7$$

$$\text{sol 8:- } 9 \overline{)838} \mid 93$$

81

28

27

1

$$Q = 93, R = 1$$

Mathematics 'B'

Topic:- Perimeter

Exercise:- 72

Find the perimeters.

(P.T.O)

sol1:- Perimeter = sum of sides

$$\text{Perimeter} = AB + BC + CA$$

$$= 6\text{cm} + 8\text{cm} + 10\text{cm} = 24\text{cm}.$$

sol2:- Perimeter = $AB + BC + CA$

$$= 8\text{cm} + 8\text{cm} + 8\text{cm} = 24\text{cm}.$$

sol3:- Perimeter = $AB + BC + CD + DA$.

$$= 4\text{cm} + 9\text{cm} + 4\text{cm} + 9\text{cm} = 26\text{cm}.$$

sol4:- Perimeter = $PQ + QR + RS + SP$.

$$= 4\text{cm} + 7\text{cm} + 8\text{cm} + 7\text{cm} = 26\text{cm}.$$

sol5:- Perimeter = $PQ + QR + RS + SP$.

$$= 6\text{cm} + 6\text{cm} + 6\text{cm} + 6\text{cm} = 24\text{cm}.$$

sol6:- Perimeter = $LM + MN + NO + OL$.

$$= 5\text{cm} + 8\text{cm} + 8\text{cm} + 5\text{cm} = 26\text{cm}.$$

Ex. 73

Count the number of squares in the shaded region.

sol1:- 8. sol2:- 4. sol3:- 15. sol4:- 7.

sol5:- 12. sol6:- 12.

Topic:- Real life problems

Exercise:- 75

Qno1:- The cost of 1kg each of the following items is given below. Raj wants to purchase these items as per his requirement mention below.

Find the cost of each item and the total amount.

	Item weight	cost per kg	Total cost.
a)	Tomatoes 2kg	Rs 32	$Rs\ 32 \times 2 = Rs. 64$
b)	Mushrooms $\frac{1}{2}$ kg	Rs 120	$Rs\ 120 \times \frac{1}{2} \text{ kg} = Rs\ 60$

C, Cookies 250g $= \frac{1}{4} \text{ kg}$	Rs 80	$\text{Rs } 80 \times \frac{20}{4} = + \text{Rs } 20$
		Total amount = Rs 144.

Qno.2:- Raj purchased 2kg Tomatoes, $\frac{1}{2} \text{ kg}$ (500g) mushrooms and 250g cookies from the convenience store. Now, he wants to check the total weight of items he purchased. What is the total weight of all the items?

Sol:- Weight of Tomatoes = 2kg = 2000g.

Weight of mushrooms = $\frac{1}{2} \text{ kg} = 500 \text{ g}$.

Weight of cookies = 250g.

$\therefore$ Total weight of three items =

$$\begin{array}{r} 2000 \text{ g} \\ + 500 \text{ g} \\ + 250 \text{ g} \\ \hline \end{array}$$

2 kg 750 g 2750 g.

Qno.3:- A pack of pulses weighs 250g. How many such packs would Raj need to buy from the convenience store to make the packets of the following weights?

Sol:- 2 kg = 2000g.

Weight of a pack of pulses = 250g.

$\therefore$ Number of required packets in 2kg = $\frac{2000}{250}$

$$250 \overline{) 2000} 8$$

$$\underline{2000}$$

8 packets

4 kg = 4000g.

Weight of a pack of pulses = 250g.

(P.T.O.)

$\therefore$ Number of required packets in 4kg = $\frac{4000}{250} \text{ g}$

$$250 \overline{) 4000} \quad 16$$

$$\underline{250}$$

$$1500$$

$$\underline{1500}$$

16 packets.

$$\frac{1}{2} \text{ kg} = 500 \text{ g}$$

weight of a pack of pulses = 250g

$\therefore$ Number of required packets in $\frac{1}{2} \text{ kg} = \frac{500}{250} \text{ g}$

$$250 \overline{) 500} \quad 2$$

$$\underline{500}$$

2 packets.

Topic:- Measurement of volume

Exercise:- 76

Qno.2:- Mr Pant has 1 litre juice. Each day he drinks 200ml in the breakfast. How many days will the juice last?

Sol:- Mr Pant has juice = 1 litre = 1000ml

He drinks each day = 200ml.

$\therefore$ Required number of days the juice will last =

$$\frac{1000 \text{ ml}}{200} = 200 \overline{) 1000} \quad 5$$

$$\underline{200}$$

$$\underline{1000}$$

5 days.

Exercise:- 77

Qno.1:- After filling all the tumblers, how much water will be left in the jug?

Sol:- 1 litre = 1000ml

Water filled in the tumblers = 100ml

(P.T.O.)

+ 150 ml

+ 200 ml

+ 500 ml

Total water filled in all the tumblers = 950 ml

 $\therefore$ Water left in the jug = 1000 ml- 950 ml50 ml

Sol b:- 2 l = 2000 ml.

Water filled in the Tumblers = 50 ml

+ 100 ml

+ 250 ml

+ 500 ml

+ 2 l = 1000 ml

Total water filled in all the Tumblers = 1900 ml

 $\therefore$ Water left in the jug = 2000 ml- 1900 ml100 ml

Sol c:- 3 l = 3000 ml

Water filled in the Tumblers = 200 ml

+ 200 ml

+ 400 ml

+ 2 l = 2000 ml

Total water filled in all the Tumblers = 2800 ml

 $\therefore$ Water left in the jug = 3000 ml- 2800 ml200 mlQno 3. A Tap is wasting 100 ml of water
(P.T.O.)

(20)
every hour. How long will it take to leak 2 litres of water?

Sol:- Water wasted in every hour = 100 ml.

$\therefore$ Time taken to leak 2 litres of water = 2 l = 2000 ml
 $= \frac{2000 \text{ ml}}{100}$

$$100 \overline{) 2000} 20$$

$$\underline{200}$$

0.

20 hours

Qno3:- Four mugs of milk, each having $\frac{1}{4}$ l is emptied into a jar.

How much milk is poured into the jar?

Sol:- Number of mugs = 4

capacity of a mug = $\frac{1}{4}$ l.

$\therefore$ Total milk poured into the jar = $\frac{1}{4} \times 4 = 1$ litre.

Qno4:- How many vessels of 500 ml each can be filled with $2\frac{1}{2}$ l petrol?

Sol:- Capacity of a vessel = 500 ml.

Quantity of petrol = $2\frac{1}{2}$ l = $\frac{2 \times 2 + 1}{2} = \frac{5}{2}$ l.

$$2 \overline{) 5} 2.5$$

$$\underline{4}$$

$$10$$

$$\underline{10}$$

$$= 2.5 \text{ l} = 2500 \text{ ml}.$$

$\therefore$ Number of required vessels =

(P.T.O)

2500 ml

500

500 | 2500 | 5

2500

5 vessels.