ST. ANDREWS SCOTS SR. SEC. SCHOOL
9th Avenue, I.P. Extension, Patparganj, Delhi – 92
Session: 2024-25

Class: 3 Subject: Mathematics Topic: Unit 6

Work to be done:

Warm up. Division on Number line.
Ex – 6A Q1 in book, Q2(b) in copy, Q3 in book
Multiplication and Division facts
Ex – 6B Q1 (a, b, f) in book, c, d, e (homework). Q2 (a, b, c) in book.
Properties of division.
Ex- 6C Q1 in book, Q2 homework.
Division of 2-digit number by 1-digit number
Ex- 6D Q1(a, d, e, g, i) in copy, Q2 (a, c) in copy
Division of 3 digit number and 4-digit number by 1-digit number
Ex- 6E Q1(a, c, e, f, k, l) in copy. Q2 (a, d, e, f, h, j) in copy
Division with remainder
Ex- 6F Q1(b, d, f) in copy. Q2(b, e, g, h, k, l) in copy
Division by 10, 100, 1000
Ex- 6G Q1(a, c, d) in copy. Q2(b, d, e) in copy. Q3 (a, c, e) in copy. Q4(a, b, e, g, I, l) in copy. Ex- 6H Q1, 2, 5, 6, 9 in copy

Exercise 6A

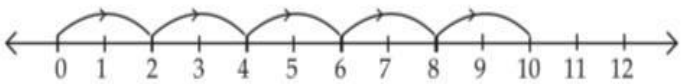
1. (b) $12 \div 3 = \boxed{4}$ (c) $18 \div 9 = \boxed{2}$ (d) $14 \div 2 = \boxed{7}$

2. (b) $15 \div 3 = \underline{5}$

$15 - 3 = 12$
$12 - 3 = 9$
$9 - 3 = 6$
$6 - 3 = 3$
$3 - 3 = 0$

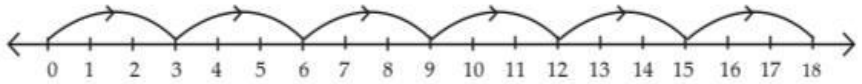
5 times

3. (a) $10 \div 2 =$



As we move 5 times to reach at 10. Hence, $10 \div 2 = 5$

(b) $18 \div 3 =$



As we move 6 times to reach at 18. Hence $18 \div 3 = 6$

Exercise 6B

1. (a) $8 \times 4 = 32$ (b) $9 \times 3 = 27$ (c) $4 \times 6 = 24$

$32 \div 8 = 4$	$27 \div 9 = 3$	$24 \div 4 = 6$
$32 \div 4 = 8$	$27 \div 3 = 9$	$24 \div 6 = 4$

(d) $6 \times 11 = 66$ (e) $4 \times 9 = 36$ (f) $7 \times 8 = 56$

$66 \div 6 = 11$	$36 \div 4 = 9$	$56 \div 7 = 8$
$66 \div 11 = 6$	$36 \div 9 = 4$	$56 \div 8 = 7$

2. (a) $63 \div 7 = 9$, $9 \times 7 = 63$ (b) $9 \div 9 = 1$, $9 \times 1 = 9$ (c) $72 \div 8 = 9$, $9 \times 8 = 72$

(d) $55 \div 5 = 11$, $11 \times 5 = 55$ (e) $70 \div 7 = 10$, $10 \times 7 = 70$ (f) $24 \div 3 = 8$, $8 \times 3 = 24$

Exercise 6C

1. (a) $\boxed{8}$ (b) $\boxed{14}$ (c) $\boxed{43}$ (d) $\boxed{1}$

(e) $\boxed{1}$ (f) $\boxed{1}$ (g) $\boxed{27}$ (h) $\boxed{16}$

(i) $\boxed{0}$ (j) $\boxed{17}$ (k) $\boxed{1}$ (l) $\boxed{0}$

2. (i) (a) 0 (ii) (c) 1

Exercise 6D

1. (a)
$$\begin{array}{r} 13 \\ 3\overline{)39} \\ -3\downarrow \\ \hline 9 \\ -9 \\ \hline 0 \end{array}$$

Check: Since, $13 \times 3 = 39$ Hence, answer is correct.

(b)
$$\begin{array}{r} 21 \\ 4\overline{)84} \\ -8\downarrow \\ \hline 04 \\ -4 \\ \hline 0 \end{array}$$

Check: Since, $21 \times 4 = 84$ Hence answer is correct.

(c)
$$\begin{array}{r} 11 \\ 5\overline{)55} \\ -5\downarrow \\ \hline 5 \\ -5 \\ \hline 0 \end{array}$$

Check:
Since, $11 \times 5 = 55$
Hence, answer is correct.

(d)
$$\begin{array}{r} 11 \\ 7\overline{)77} \\ -7\downarrow \\ \hline 07 \\ -7 \\ \hline 0 \end{array}$$

Check:
Since, $11 \times 7 = 77$
Hence, answer is correct.

(e)
$$\begin{array}{r} 12 \\ 4\overline{)48} \\ -4\downarrow \\ \hline 08 \\ -8 \\ \hline 0 \end{array}$$

Check:
Since, $12 \times 4 = 48$
Hence, answer is correct.

(f)
$$\begin{array}{r} 11 \\ 6\overline{)66} \\ -6\downarrow \\ \hline 06 \\ -6 \\ \hline 0 \end{array}$$

Check:
Since, $11 \times 6 = 66$
Hence, answer is correct.

(g)
$$\begin{array}{r} 42 \\ 2\overline{)84} \\ -8\downarrow \\ \hline 04 \\ -4 \\ \hline 0 \end{array}$$

Check:
Since, $42 \times 2 = 84$
Hence, answer is correct.

(h)
$$\begin{array}{r} 12 \\ 3\overline{)36} \\ -3\downarrow \\ \hline 06 \\ -6 \\ \hline 0 \end{array}$$

Check:
Since, $12 \times 3 = 36$
Hence, answer is correct.

(i)
$$\begin{array}{r} 21 \\ 2\overline{)42} \\ -4\downarrow \\ \hline 02 \\ -2 \\ \hline 0 \end{array}$$

Check:
Since, $21 \times 2 = 42$
Hence, answer is correct.

2. (a)
$$\begin{array}{r} 33 \\ 2\overline{)66} \\ -6\downarrow \\ \hline 06 \\ -6 \\ \hline 0 \end{array}$$

(b)
$$\begin{array}{r} 11 \\ 8\overline{)88} \\ -8\downarrow \\ \hline 08 \\ -8 \\ \hline 0 \end{array}$$

(c)
$$\begin{array}{r} 31 \\ 3\overline{)93} \\ -9\downarrow \\ \hline 03 \\ -3 \\ \hline 0 \end{array}$$

(d)
$$\begin{array}{r} 11 \\ 4\overline{)44} \\ -4\downarrow \\ \hline 04 \\ -4 \\ \hline 0 \end{array}$$

Exercise 6E

1. (a)
$$\begin{array}{r} 222 \\ 2\overline{)444} \\ -4\downarrow\downarrow \\ \hline 04 \\ -4\downarrow \\ \hline 04 \\ -4 \\ \hline 0 \end{array}$$
Ans: 222

(b)
$$\begin{array}{r} 231 \\ 3\overline{)693} \\ -6\downarrow\downarrow \\ \hline 09 \\ -9\downarrow \\ \hline 03 \\ -3 \\ \hline 0 \end{array}$$
Ans: 231

(c)
$$\begin{array}{r} 101 \\ 5\overline{)505} \\ -5\downarrow\downarrow \\ \hline 005 \\ -5 \\ \hline 0 \end{array}$$
Ans: 101

(d)
$$\begin{array}{r} 133 \\ 3\overline{)399} \\ -3\downarrow \\ \hline 09 \\ -9\downarrow \\ \hline 09 \\ -9 \\ \hline 0 \end{array}$$
Ans: 133

(e)
$$\begin{array}{r} 302 \\ 2\overline{)604} \\ -6\downarrow\downarrow \\ \hline 004 \\ -4 \\ \hline 0 \end{array}$$
Ans: 302

(f)
$$\begin{array}{r} 300 \\ 3\overline{)900} \\ -9\downarrow\downarrow \\ \hline 000 \end{array}$$
Ans: 300

(g)
$$\begin{array}{r} 1210 \\ 4\overline{)4840} \\ -4\downarrow \\ \hline 08 \\ -8\downarrow \\ \hline 04 \\ -4\downarrow \\ \hline 00 \end{array}$$
Ans: 1210

(h)
$$\begin{array}{r} 2131 \\ 3\overline{)6393} \\ -6\downarrow \\ \hline 03 \\ -3\downarrow \\ \hline 09 \\ -9\downarrow \\ \hline 03 \\ -3 \\ \hline 0 \end{array}$$
Ans: 2131

(i)
$$\begin{array}{r} 1110 \\ 5\overline{)5550} \\ -5\downarrow \\ \hline 05 \\ -5\downarrow \\ \hline 05 \\ -5\downarrow \\ \hline 00 \end{array}$$
Ans: 1110

(j)
$$\begin{array}{r} 4200 \\ 2\overline{)8400} \\ -8\downarrow\downarrow \\ \hline 04 \\ -4 \\ \hline 000 \end{array}$$
Ans: 4200

(k)
$$\begin{array}{r} 3000 \\ 3\overline{)9000} \\ -9\downarrow\downarrow \\ \hline 0000 \end{array}$$
Ans: 3000

(l)
$$\begin{array}{r} 2021 \\ 4\overline{)8084} \\ -8\downarrow\downarrow \\ \hline 008 \\ -8\downarrow \\ \hline 04 \\ -4 \\ \hline 0 \end{array}$$
Ans: 2021

2. (a)
$$\begin{array}{r} 3002 \\ 3\overline{)9006} \\ -9\downarrow\downarrow\downarrow\downarrow \\ \hline 0006 \\ -6 \\ \hline 0 \end{array}$$
Ans: 3002

(b)
$$\begin{array}{r} 222 \\ 3\overline{)666} \\ -6\downarrow \\ \hline 06 \\ -6\downarrow \\ \hline 06 \\ -6 \\ \hline 0 \end{array}$$
Ans: 222

(c)
$$\begin{array}{r} 333 \\ 3\overline{)999} \\ -9\downarrow \\ \hline 09 \\ -9\downarrow \\ \hline 09 \\ -9 \\ \hline 0 \end{array}$$
Ans: 333

(d)
$$\begin{array}{r} 2120 \\ 3\overline{)6360} \\ -6\downarrow \\ \hline 03 \\ -3\downarrow \\ \hline 06 \\ -6 \\ \hline 0 \end{array}$$
Ans: 2120

(e)
$$\begin{array}{r} 2211 \\ 4\overline{)8844} \\ -8\downarrow \\ \hline 08 \\ -8\downarrow \\ \hline 04 \\ -4\downarrow \\ \hline 04 \\ -4 \\ \hline 0 \end{array}$$
Ans: 2211

(f)
$$\begin{array}{r} 2400 \\ 2\overline{)4800} \\ -4\downarrow \\ \hline 08 \\ -8\downarrow\downarrow \\ \hline 000 \end{array}$$
Ans: 2400

(g)
$$\begin{array}{r} 111 \\ 7\overline{)777} \\ -7\downarrow \\ \hline 07 \\ -7\downarrow \\ \hline 07 \\ -7 \\ \hline 0 \end{array}$$
Ans: 111

(h)
$$\begin{array}{r} 2011 \\ 4\overline{)8044} \\ -8\downarrow \\ \hline 04 \\ -4\downarrow \\ \hline 04 \\ -4 \\ \hline 0 \end{array}$$
Ans: 2011

(i)
$$\begin{array}{r} 1011 \\ 5\overline{)5055} \\ -5\downarrow\downarrow\downarrow \\ \hline 005 \\ -5\downarrow \\ \hline 05 \\ -5 \\ \hline 0 \end{array}$$
Ans: 1011

(j)
$$\begin{array}{r} 1403 \\ 2\overline{)2806} \\ -2\downarrow \\ \hline 08 \\ -8 \\ \hline 006 \\ -6 \\ \hline 0 \end{array}$$
Ans: 1403

(k)
$$\begin{array}{r} 2000 \\ 4\overline{)8000} \\ -8\downarrow\downarrow\downarrow \\ \hline 0000 \end{array}$$
Ans: 2000

(l)
$$\begin{array}{r} 123 \\ 3\overline{)369} \\ -3\downarrow \\ \hline 06 \\ -6\downarrow \\ \hline 09 \\ -9 \\ \hline 0 \end{array}$$
Ans: 123

Exercise 6F

1. (a)
$$\begin{array}{r} 3 \\ 3\overline{)10} \\ -9 \\ \hline 1 \end{array}$$
Check: Divisor = 3, Quotient = 3, Remainder = 1
Divisor × Quotient + Remainder = 3 × 3 + 1 = 10
which is equal to dividend, so answer is correct.

(b)
$$\begin{array}{r} 7 \\ 2\overline{)15} \\ -14 \\ \hline 1 \end{array}$$
Check: Divisor = 2, Quotient = 7, Remainder = 1
Divisor × Quotient + Remainder = 2 × 7 + 1 = 15
which is equal to dividend, so answer is correct.

(c)
$$\begin{array}{r} 21 \\ 3\overline{)65} \\ -6\downarrow \\ \hline 05 \\ -3 \\ \hline 2 \end{array}$$
Check: Divisor = 3, Quotient = 21, Remainder = 2
Divisor × Quotient + Remainder 3 × 21 + 2 = 63 + 2 = 65
which is equal to dividend. So, answer is correct.

(d)
$$\begin{array}{r} 131 \\ 3\overline{)394} \\ -3\downarrow \\ \hline 09 \\ -9\downarrow \\ \hline 04 \\ -3 \\ \hline 1 \end{array}$$
Check: Divisor = 3, Quotient = 131, Remainder = 1
Divisor × Quotient + Remainder
= 3 × 131 + 1 = 393 + 1 = 394
which is equal to dividend. So, answer is correct.

(e)
$$\begin{array}{r} 1323 \\ 2\overline{)2647} \\ -2\downarrow \\ \hline 06 \\ -6\downarrow \\ \hline 04 \\ -4\downarrow \\ \hline 07 \\ -6 \\ \hline 1 \end{array}$$

Check: Divisor = 2, Quotient = 1323, Remainder = 1

Divisor × Quotient + Remainder

= 2 × 1323 + 1 = 2646 + 1 = 2647

which is equal to dividend. So, answer is correct.

(f)
$$\begin{array}{r} 3211 \\ 3\overline{)9635} \\ -9\downarrow \\ \hline 06 \\ -6\downarrow \\ \hline 03 \\ -3\downarrow \\ \hline 05 \\ -3 \\ \hline 2 \end{array}$$

Check: Divisor = 3, Quotient = 3211, Remainder = 2

Divisor × Quotient + Remainder

= 3 × 3211 + 2 = 9633 + 2 = 9635

which is equal to dividend.

So, answer is correct.

2. (a)
$$\begin{array}{r} 4321 \\ 2\overline{)8643} \\ -8\downarrow \\ \hline 06 \\ -6\downarrow \\ \hline 04 \\ -4\downarrow \\ \hline 03 \\ -2 \\ \hline 1 \end{array}$$

Quotient = 4321

Remainder = 1

(b)
$$\begin{array}{r} 320 \\ 3\overline{)962} \\ -9\downarrow \\ \hline 06 \\ -6\downarrow \\ \hline 02 \end{array}$$

Quotient = 320

Remainder = 2

(c)
$$\begin{array}{r} 201 \\ 4\overline{)807} \\ -8\downarrow\downarrow \\ \hline 007 \\ -4 \\ \hline 3 \end{array}$$

Quotient = 201

Remainder = 3

(d) $3\overline{)9607}$ = 3202

-9

06

-6

007

-6

1

Quotient = 3202
Remainder = 1

(e) $2\overline{)4027}$ = 2013

-40

2

-2

07

-6

1

Quotient = 2013
Remainder = 1

(f) $2\overline{)8261}$ = 4130

-8

02

-2

06

-6

1

Quotient = 4130
Remainder = 1

(g) $4\overline{)8009}$ = 2002

-8

0009

-8

1

Quotient = 2002
Remainder = 1

(h) $9\overline{)996}$ = 110

-9

09

-9

6

Quotient = 110
Remainder = 6

(i) $3\overline{)365}$ = 121

-3

06

-6

05

-3

2

Quotient = 121
Remainder = 2

(j) $3\overline{)6968}$ = 2322

-6

09

-9

06

-6

08

-6

2

Quotient = 2322
Remainder = 2

(k) $5\overline{)554}$ = 110

-5

05

-05

04

-0

4

Quotient = 110
Remainder = 4

(l) $4\overline{)489}$ = 122

-4

08

-8

09

-8

1

Quotient = 122
Remainder = 1

Exercise 6G

1. (a) $10\overline{)25}$ = 2

-20

5

Quotient = 2
Remainder = 5

(b) $10\overline{)351}$ = 35

-35

51

-50

01

Quotient = 35
Remainder = 1

(c) $10\overline{)777}$ = 77

-70

77

-70

07

Quotient = 77
Remainder = 7

(d) $10\overline{)640}$ → 64; -60; 40; -40; 00
Quotient = 64
Remainder = 0

(e) $10\overline{)415}$ → 41; -40; 15; -10; 05
Quotient = 41
Remainder = 5

(f) $10\overline{)565}$ → 56; -50; 65; -60; 05
Quotient = 56
Remainder = 5

2. (a) $100\overline{)835}$ → 8; -800; 35
Quotient = 8
Remainder = 35

(b) $100\overline{)467}$ → 4; -400; 67
Quotient = 4
Remainder = 67

(c) $100\overline{)1919}$ → 19; -100; 919; -900; 19
Quotient = 19
Remainder = 19

(d) $100\overline{)2005}$ → 2; -200; 05
Quotient = 2
Remainder = 5

(e) $100\overline{)3154}$ → 31; -300; 154; -100; 54
Quotient = 31
Remainder = 54

(f) $100\overline{)9890}$ → 98; -900; 890; -800; 90
Quotient = 98
Remainder = 90

3. (a) $1000\overline{)9000}$ → 9; -9000; 0
Quotient = 9
Remainder = 0

(b) $1000\overline{)2959}$ → 2; -2000; 959
Quotient = 2
Remainder = 959

(c) $1000\overline{)3435}$ → 3; -3000; 435
Quotient = 3
Remainder = 435

(d) $1000\overline{)8888}$ → 8; -8000; 888
Quotient = 8
Remainder = 888

(e)
$$\begin{array}{r} 1 \\ 1000\overline{)1009} \\ -1000 \\ \hline 9 \end{array}$$

Quotient = 1
Remainder = 9

(f)
$$\begin{array}{r} 7 \\ 1000\overline{)7348} \\ -7000 \\ \hline 348 \end{array}$$

Quotient = 7
Remainder = 348

4. (a)

Th	H	T	O
8	6	5	4

The digit '4' at the ones place is remainder and 865 is the quotient.
(Division rule by "10")

(b)

Th	H	T	O
	5	6	4

The digits at the tens and ones place i.e. "64" is the remainder.
And remaining part of the number i.e. "5" is the quotient.

(c)

Th	H	T	O
1	3	4	7

The digits at the tens and ones place i.e "47" is the remainder.
And remaining part of the number i.e. "13" is the quotient.

(d)

Th	H	T	O
5	3	7	9

The digits at the tens and ones place i.e "79" is the remainder.
And remaining part of the number i.e. "53" is the quotient.

(e)

Th	H	T	O
5	2	0	0

The digits at the tens and ones place i.e "0" is the remainder.
And remaining part of the number i.e. "52" is the quotient.

(f)

Th	H	T	O
	6	8	7

The digits at the ones place i.e. 7 is the remainder.
And remaining part of the number i.e. "68" is the quotient.

(g)

Th	H	T	O
8	6	5	4

The digits at the hundreds, tens and ones place i.e "654" is the remainder.

And remaining part of the number i.e. "8" is the quotient.

(h)

Th	H	T	O
2	8	4	5

The digits at the hundreds, tens and ones place i.e. "845" is the remainder.

And the remaining part of the number i.e. "2" is the quotient.

(i)

Th	H	T	O
	7	6	3

The digits at ones place i.e. "3" is the remainder.

And the remaining part of the number i.e. "76" is the quotient.

(j)

Th	H	T	O
9	0	0	0

The digits at the hundreds, tens and ones place i.e. "000" or "0" is the remainder.

And the remaining part of the number i.e. "9" is the quotient.

(k)

Th	H	T	O
4	8	3	2

The digits at tens and ones place i.e. "32" is the reminder.
And remaining part of the number i.e "48" is the quotient.

(l)

Th	H	T	O
2	7	7	4

The digits at the hundreds, tens and ones place i.e. "774" is the remainder.
And the remaining part of the number i.e. "2" is the quotient.

Exercise 6H

1. 1 week = 7 days

In 7 days, no. of pizzas sold = 49

In one day no. of pizzas sold = 49 ÷ 7 = 7 pizzas

$$7\overline{)49}\ \begin{array}{r}7\\ -49\\ \hline 0\end{array}$$

2. Total no. of plants = 497

In one row no. of plants = 7

Thus, no. of rows = 497 ÷ 7 = 71.

$$7\overline{)497}\ \begin{array}{r}71\\ -49\\ \hline 07\\ -7\\ \hline 0\end{array}$$

3. Total no. of muffins = 360

In one box, no. of muffins = 4

Thus, no. of boxes = 360 ÷ 4 = 90 boxes.

$$4\overline{)360}\ \begin{array}{r}90\\ -36\\ \hline 00\end{array}$$

4. Total no. of fishes = 56

In one tank, no. of fishes = 7

Thus, no. of fish tank = 56 ÷ 7 = 8

$$7\overline{)56}\ \begin{array}{r}8\\ -56\\ \hline 0\end{array}$$

5. Total money collected = ₹ 284

Cost of one ticket = ₹ 4

Thus, no. of tickets = 284 ÷ 4 = 71

$$4\overline{)284}\ \begin{array}{r}71\\ -28\\ \hline 04\\ -4\\ \hline 0\end{array}$$

6. In 1 day, cow gives milk = 11 litres

Total quantity of milk = 2244 litres

Thus, no. of days = 2244 ÷ 11 = 204

$$11\overline{)2244}\ \begin{array}{r}204\\ -22\downarrow\downarrow\\ \hline 044\\ -44\\ \hline 0\end{array}$$

7. Number of books in shelves = 864

Number of shelves = 9

Number of books in each shelf = 864 ÷ 9 = 96

$$9\overline{)864}\ \begin{array}{r}96\\ -81\downarrow\\ \hline 54\\ -54\\ \hline 0\end{array}$$

8. Total length of rope = 192 m

Number of students = 8

Thus, each student will get 192 ÷ 8 = 24 m length of rope.

$$\begin{array}{r} 24 \\ 8\overline{)192} \\ -16\downarrow \\ \hline 32 \\ -32 \\ \hline 0 \end{array}$$

9. A bottle of juice costs = ₹ 9

Total money = ₹ 1835

Thus, number of bottles which can be bought by ₹ 1835 = 1835 ÷ 9 = 203

$$\begin{array}{r} 203 \\ 9\overline{)1835} \\ -18\downarrow\downarrow \\ \hline 35 \\ -27 \\ \hline 8 \end{array}$$

Number of bottle juice bought from ₹ 1835 = 203

And money left after purchase = ₹ 8

10. Total number of Apples = 920

Total number of boxes = 8

Thus, number of apples in each box = 920 ÷ 8= 115

$$\begin{array}{r} 115 \\ 8\overline{)920} \\ -8\downarrow \\ \hline 12 \\ -8\downarrow \\ \hline 40 \\ -40 \\ \hline 0 \end{array}$$