Ch-5
DIVISION

Division Using Multiplication Facts

1. Fill in the blanks:

(a)	$3 \times 1 = 3$	$3 \div 1 = 3$	(f)	$9 \times 6 = 54$	$54 \div 6 = 9$
(b)	$7 \times 2 = 14$	$14 \div 2 = 7$	(g)	$5 \times 7 = 35$	$35 \div 7 = 5$
(c)	$4 \times 3 = 12$	$12 \div 3 = 4$	(h)	$9 \times 8 = 72$	$72 \div 8 = 9$
(d)	$7 \times 4 = 28$	$28 \div 4 = 7$	(i)	$7 \times 9 = 63$	$63 \div 9 = 7$
(e)	$8 \times 5 = 40$	$40 \div 5 = 8$	(j)	$8 \times 10 = 80$	$80 \div 10 = 8$

2. Divide:

(a)
$$\begin{array}{r} 44 \\ 6\overline{)264} \\ -24\downarrow \\ \hline 024 \\ -24 \\ \hline 00 \end{array}$$

Quotient is 44

(b)
$$\begin{array}{r} 82 \\ 7\overline{)574} \\ -56\downarrow \\ \hline 014 \\ 14 \\ \hline 00 \end{array}$$

Quotient is 82

(c)
$$\begin{array}{r} 98 \\ 8\overline{)784} \\ -72\downarrow \\ \hline 064 \\ -64 \\ \hline 00 \end{array}$$

Quotient is 98

(d)
$$\begin{array}{r} 49 \\ 9\overline{)441} \\ 36\downarrow \\ \hline 081 \\ 81 \\ \hline 00 \end{array}$$

Quotient is 49

Remainder is 00

(e)
$$\begin{array}{r} 41 \\ 6\overline{)251} \\ 24\downarrow \\ \hline 011 \\ 06 \\ \hline 05 \end{array}$$

Quotient is 41

Remainder is 05

(f)
$$\begin{array}{r} 34 \\ 7\overline{)244} \\ 21\downarrow \\ \hline 034 \\ 28 \\ \hline 06 \end{array}$$

Quotient is 34

Remainder is 06

(g)
$$\begin{array}{r} 66 \\ 8\overline{)535} \\ -48\downarrow \\ \hline 055 \\ 48 \\ \hline 07 \end{array}$$

Quotient is 66

Remainder is 07

(h)
$$\begin{array}{r} 35 \\ 10\overline{)356} \\ 30\downarrow \\ \hline 56 \\ -50 \\ \hline 06 \end{array}$$

Quotient is 35

Remainder is 06

(i)
$$\begin{array}{r} 51 \\ 5\overline{)256} \\ -25\downarrow \\ \hline 006 \\ -5 \\ \hline 01 \end{array}$$

Quotient is 51

Remainder is 01

3. There are 207 flowers. They have to be made into bunches of 9 flowers each. How many bunches can be made?

Number of bunches of flower can be made = 207 ÷ 9 = 23.

4. A carton has 873 items. They have to be packed into packets of 10 items each. How many packets can be packed? How many items will be left behind?

Number of packets can be packed = 873 ÷ 10 = 87

03 item will be left.

EXERCISE 5.1

1. Fill in the blanks:

(a) Divide into 11 groups using table of 11.

11 ÷ 11 =	1	(1 × 11 = 11)
22 ÷ 11 =	2	(2 × 11 = 22)
33 ÷ 11 =	3	(3 × 11 = 33)
44 ÷ 11 =	4	(4 × 11 = 44)
55 ÷ 11 =	5	(5 × 11 = 55)
66 ÷ 11 =	6	(6 × 11 = 66)
77 ÷ 11 =	7	(7 × 11 = 77)
88 ÷ 11 =	8	(8 × 11 = 88)
99 ÷ 11 =	9	(9 × 11 = 99)
110 ÷ 11 =	10	(10 × 11 = 110)

(b) Divide into 12 groups using table of 12.

12 ÷ 12 =	1	(1 × 12 = 12)
24 ÷ 12 =	2	(2 × 12 = 24)
36 ÷ 12 =	3	(3 × 12 = 36)
48 ÷ 12 =	4	(4 × 12 = 48)
60 ÷ 12 =	5	(5 × 12 = 60)
72 ÷ 12 =	6	(6 × 12 = 72)
84 ÷ 12 =	7	(7 × 12 = 84)
96 ÷ 12 =	8	(8 × 12 = 96)
108 ÷ 12 =	9	(9 × 12 = 108)
120 ÷ 12 =	10	(10 × 12 = 120)

(c) Divide into 13 groups using table of 13.

13 ÷ 13 =	1	(1 × 13 = 13)
26 ÷ 13 =	2	(2 × 13 = 26)
39 ÷ 13 =	3	(3 × 13 = 39)
52 ÷ 13 =	4	(4 × 13 = 52)
65 ÷ 13 =	5	(5 × 13 = 65)
78 ÷ 13 =	6	(6 × 13 = 78)
91 ÷ 13 =	7	(7 × 13 = 91)
104 ÷ 13 =	8	(8 × 13 = 104)

117 ÷ 13 = 9 (9 × 13 = 117)
130 ÷ 13 = 10 (10 × 13 = 130)

(d) Divide into 14 groups using table of 14.

14 ÷ 14 = 1 (1 × 14 = 14)
28 ÷ 14 = 2 (2 × 14 = 28)
42 ÷ 14 = 3 (3 × 14 = 42)
56 ÷ 14 = 4 (4 × 14 = 56)
70 ÷ 14 = 5 (5 × 14 = 70)
84 ÷ 14 = 6 (6 × 14 = 84)
98 ÷ 14 = 7 (7 × 14 = 98)
112 ÷ 14 = 8 (8 × 14 = 112)
126 ÷ 14 = 9 (9 × 14 = 126)
140 ÷ 14 = 10 (10 × 14 = 140)

(e) Divide into 15 groups using table of 15.

15 ÷ 15 = 1 (1 × 15 = 15)
30 ÷ 15 = 2 (2 × 15 = 30)
45 ÷ 15 = 3 (3 × 15 = 45)
60 ÷ 15 = 4 (4 × 15 = 60)
75 ÷ 15 = 5 (5 × 15 = 75)
90 ÷ 15 = 6 (6 × 15 = 90)
105 ÷ 15 = 7 (7 × 15 = 105)
120 ÷ 15 = 8 (8 × 15 = 120)
135 ÷ 15 = 9 (9 × 15 = 135)
150 ÷ 15 = 10 (10 × 15 = 150)

2. Divide using multiplication facts of 11 to 15.

(a) 55 ÷ 11 = 5
(b) 91 ÷ 13 = 7
(c) 70 ÷ 14 = 5
(d) 60 ÷ 12 = 5
(e) 105 ÷ 15 = 7
(f) 36 ÷ 12 = 3
(g) 75 ÷ 15 = 5
(h) 28 ÷ 14 = 2
(i) 88 ÷ 11 = 8

72 ÷ 12 = 6
30 ÷ 15 = 2
39 ÷ 13 = 3
66 ÷ 11 = 6
126 ÷ 14 = 4
135 ÷ 15 = 9
42 ÷ 14 = 3
120 ÷ 12 = 10
26 ÷ 13 = 2

84 ÷ 14 = 6
110 ÷ 11 = 10
78 ÷ 13 = 6
120 ÷ 15 = 8
98 ÷ 14 = 7
96 ÷ 12 = 8
150 ÷ 15 = 10
77 ÷ 11 = 7
117 ÷ 13 = 9

Long Division without Remainder

Example 1: 3751 ÷ 11.

Solution:

$$
\begin{array}{r}
341 \\
11\overline{)3751} \\
33 \\
\hline
45 \\
44 \\
\hline
11 \\
11 \\
\hline
0
\end{array}
$$

Quotient = 341

Exercise 5.2

1. $9\overline{)3168} = 352$

$-27\downarrow$

046

$45\downarrow$

018

-18

00

2. $10\overline{)2750} = 275$

$-20\downarrow$

075

$70\downarrow$

050

-50

00

3. $11\overline{)1342} = 122$

$-11\downarrow$

024

$-22\downarrow$

022

-22

00

4. $11\overline{)3982} = 362$

$-33\downarrow$

068

$-66\downarrow$

022

-22

00

5. $12\overline{)7572} = 631$

$-72\downarrow$

037

$-36\downarrow$

012

12

00

6. $12\overline{)6312} = 526$

$-60\downarrow$

031

$-24\downarrow$

72

-72

00

7.
$$\begin{array}{r} 97 \\ 13\overline{)1261} \\ -117\downarrow \\ \hline 91 \\ -91 \\ \hline 00 \end{array}$$

8.
$$\begin{array}{r} 529 \\ 13\overline{)6877} \\ -65\downarrow\ \ | \\ \hline 037\ \ | \\ -26\downarrow \\ \hline 117 \\ -117 \\ \hline 000 \end{array}$$

9.
$$\begin{array}{r} 602 \\ 14\overline{)8428} \\ 84\downarrow\downarrow \\ \hline 0028 \\ 28 \\ \hline 00 \end{array}$$

10.
$$\begin{array}{r} 594 \\ 14\overline{)8316} \\ -70\downarrow\ \ | \\ \hline 131\ \ | \\ 126\downarrow \\ \hline 0056 \\ -56 \\ \hline 00 \end{array}$$

11.
$$\begin{array}{r} 631 \\ 15\overline{)9465} \\ -90\downarrow\ \ | \\ \hline 046\ \ | \\ 45\downarrow \\ \hline 015 \\ 15 \\ \hline 00 \end{array}$$

12.
$$\begin{array}{r} 155 \\ 15\overline{)2325} \\ -15\downarrow\ \ | \\ \hline 082\ \ | \\ -75\downarrow \\ \hline 075 \\ -75 \\ \hline 00 \end{array}$$

Long Division with Remainder

Example 1: 7593 ÷ 12.

Solution:

$$\begin{array}{r} 632 \\ 12\overline{)7593} \\ 72 \\ \hline 39 \\ 36 \\ \hline 33 \\ 24 \\ \hline 9 \end{array}$$

Quotient = 632; Remainder = 9

Exercise 5.3

1. $8\overline{)2383}$ → 297; -16; 078; -72; 063; -56; 07

2. $9\overline{)5631}$ → 625; -54; 023; -18; 051; 45; 06

3. $11\overline{)2762}$ → 251; -22; 056; -55; 012; -11; 01

4. $11\overline{)3891}$ → 353; -33; 059; -55; 041; -33; 08

5. $12\overline{)8673}$ → 722; -84; 027; -24; 033; -24; 09

6. $12\overline{)3267}$ → 272; -24; 086; -84; 027; -24; 03

7. $13\overline{)8220}$ → 632; 78; 042; 39; 030; 26; 04

8. $13\overline{)6830}$ → 525; -65; 033; -26; 70; -65; 15

9. $14\overline{)4545}$ → 324; -42; 034; -28; 065; -56; 09

10. $14\overline{)6335}$ → 452; -56; 073; -70; 035; -28; 07

11. $15\overline{)9293}$ → 619; -90; 029; 15; 143; -135; 008

12. $15\overline{)9781}$ → 652; -90; 078; -75; 031; -30; 01

EXERCISE 5.4

1. A mini theatre has 121 seats arranged in 11 equal rows. How many seats are in each row?

⇒ Number of seats a mini theatre has = 121

Number of rows = 11

Number of seats each row has = 121 ÷ 11 = 11

```
   11
11)121
   11↓
   011
    11
   ---
    00
```

Answer: 11 seats.

2. 117 pencils are to be equally packed in 13 packets. How many pencils must be packed in each packet?

⇒ Number of pencils = 117

Number of packets = 13

Number of pencils in each packet = 117 ÷ 13 = 9

```
    9
13)117
  -117
  ----
   000
```

Answer: 9 pencils packed in each packet.

3. An orchard has 126 trees planted in 14 equal rows. How many trees are in each row?

⇒ Number of trees an Orchard has = 126

Number of equal row = 14

Number of trees in each row = 126 ÷ 14 = 9

```
14)126(9
   126
   ---
   000
```

Answer: 9 trees are in each row.

165 men were equally divided into 15 teams. How many men are in each team?

⇒ Total number of men = 165
Number of team = 15
Number of men in each team = 165 ÷ 15 = 11

```
   11
15)165
   15↓
  015
   15
  ---
   00
```

Answer: There are 11 men in each team.

5. 7290 toffees are to be packed in packets containing 10 toffees each. How many such packets can be made?

⇒ Total number of toffees = 7290
Number of toffees in each packets = 10
Number of packets can be made = 7290 ÷ 10
= 729

```
   729
10)7290
   70↓
  ---
   029
    20↓
   ---
   090
    90
   ---
    00
```

Answer: There are 729 packets can be made.

6. 6336 saplings are to be equally planted in 11 gardens. How many saplings will be planted in each garden?

⇒ Total number of saplings = 6336
Number of garden = 11
Number of saplings in each garden = 6336 ÷ 11
= 576

```
   576
11)6336
  -55↓
  ---
   083
   -77↓
   ---
   066
    66
   ---
    00
```

Answer: There are 576 saplings will be planted in each garden.

7. Each bundle is to have 12 sheets. How many bundles can be made using 1728 sheets?

⇒ Number of sheets = 1728
Number of sheets each bundle have = 12
Number of bundles can be made = 1728 ÷ 12

```
12)1728(144
 12↓
 052
 -48↓
 048
  48
  00
```

Answer: There are 144 bundles.

8. 4862 eggs are to be packed in trays with 13 eggs in each tray. How many trays can be packed?

⇒ Total number of eggs = 4862
Number of eggs in each trays = 13
Number of trays can be packed = 4862 ÷ 13

```
13)4862(374
 39↓
 096
  91↓
  052
   52
   00
```

Answer: There are 374 trays can be packed.

9. 7280 bags of wheat have to be equally stored in 14 godowns. How many bags will be stored in each godown?

⇒ Number of bags of wheat = 7280
Number of godowns = 14
Number of bags will be stored in each godown = 7280 ÷ 14
=

```
14)7280(520
 70↓
 028
  28↓
  000
```

Answer: There are 520 bags will be stored in each godown.

10. 7980 pencils have to be packed in packets of 15 pencils each. How many packets can be made?

⇒ Number of pencils = 7980

Number of pencils in each packets = 15

Number of packets can be made = 7980 ÷ 15

```
15)7980(532
   75↓
   048
    45↓
    030
     30
     00
```

Answer: There are 532 packets.

11. 6040 items are to be packed in packets containing 11 items each. How many such complete packets can be made? How many items will be left behind?

Number of items = 6040

Number of items in each packets = 11

Number of packets can be made = 6040 ÷ 11

= 549

```
    549
11)6040
   55↓
   054
    44↓
    100
     99
     01
```

Answer: There are 549 packets can be made and 01 left.

12. 9267 saplings are to be equally planted in 12 gardens. How many saplings will be planted in each garden? How many saplings will be left behind?

Number of Saplings = 9267

Number of gardens = 12

Number of saplings will be planted in each garden = 9267 ÷ 12

```
     772
12) 9267
    84↓
    086
     84↓
     027
      24
      03
```

Answer: 772 saplings will be planted.

03 saplings are left.

13. Each bundle is to have 13 sheets. How many complete bundles can be made using 2370 sheets? How many sheets will be left behind?

Number of sheets = 2370
Number of sheets in each bundle = 13
Number of bundles can be made = 2370÷13
= 04
There are 182 sheets will be made and 04 sheets will be left.

$$\begin{array}{r} 182 \\ 13\overline{)2370} \\ 13\downarrow \\ \hline 107 \\ 104\downarrow \\ \hline 0030 \\ -26 \\ \hline 04 \end{array}$$

Answer:

14. 4855 eggs are to be packed in trays with 15 eggs in each tray. How many complete trays can be packed? How many eggs will be left behind?

= Number of eggs = 4855
Number of eggs in each tray = 15 eggs
Number of trays can be packed = 4855÷15
There are 323 trays can be packed and 10 eggs will be left.

$$\begin{array}{r} 323 \\ 15\overline{)4855} \\ 45\downarrow \\ \hline 035 \\ -30\downarrow \\ \hline 055 \\ -45 \\ \hline 10 \end{array}$$

Answer:

Division Facts

Property 1: If a number is divided by itself the answer is always 1.

$2527 \div 2527 = 1$

Let A be any number. Then

$$A \div A = 1$$

Property 2: If a number is divided by 1 the answer is the number itself.

$3345 \div 1 = 3345$

Let A be any number. Then

$$A \div 1 = A$$

EXERCISE 5.5

Fill in the blanks:

1. 2363 ÷ 2363 = 1
2. 2446 ÷ 2446 = 1
3. 4416 ÷ 4416 = 1
4. 5188 ÷ 5188 = 1
5. 8345 ÷ 8345 = 1
6. 7441 ÷ 7441 = 1
7. 7264 ÷ 1 = 7264
8. 5215 ÷ 1 = 5215
9. 3527 ÷ 1 = 3527
10. 2424 ÷ 1 = 2424
11. 8257 ÷ 1 = 8257
12. 4738 ÷ 1 = 4738

REVIEW EXERCISE

1. Divide:

(a) 11)8426 = 766
77, 072, −66, 066, −66, 00

(b) 12)7248 = 604
−72, 0048, −48, 00

(c) 13)9243 = 711
−91, 014, −13, 013, 13, 00

(d) 15)3345 = 223
−30, 034, −30, 045, −45, 00

2. 8582 items were equally packed in 14 boxes. How many items were packed in each box?

Number of items = 8582

~~Number of boxes = 14~~

Number of items canbe packed in each box = 613

There are 613 items in each box.

3. There are 7152 balls. They have to be packed into packets of 12 each. How many packets can be made? How many balls will be left behind?

Number of balls = 7152

~~Number of balls in each packets = 12~~

Number of packets can be made = 596 packets

There are 596 packets can be made.

4. Divide the sum of 2335 and 5695 by 11.

130

Sum = 2335 + 5695 = 8030

8030 ÷ 11 = 730

5. Subtract 4735 from 9285 and divide the answer by 13.

Subtraction = 9285 − 4735 = 4550

4550 ÷ 13 = 350

6. Multiply 1344 by 5 and divide the product by 12.

Multiplication = 1344 × 5 = 6720

6720 ÷ 12 = 560

7. Each box has 2870 buttons. Three such boxes were opened. Now buttons were repacked into packets of 14 buttons each. How many packets will be obtained?

Number of buttons = 2870

8. Round 8972 to nearest hundreds and divide the result by 15.

Nearest hundreds = 8972

= 72 > 50 = 9000

= 9000 ÷ 15 = 400