

## 4. [ $\div$ Whole Numbers to 12]

### Skill 4.1 Dividing whole numbers from 1 to 12.

MM4.2 11 22 33 44  
MM5.1 11 22 33 44

- Reword the division by turning it into a multiplication.
- Use a multiplication table.
- Convert the multiplication back to a division.

Example: How many 6's go into 42?

$$42 \div 6 = ?$$

Reworded: What number multiplied by 6 equals 42?

$$6 \times ? = 42$$

From the multiplication table,  $6 \times 7 = 42$

$$\text{So } 42 \div 6 = 7$$

MULTIPLICATION TABLE

$\times$	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

Q. 

	42	60	18	36	30	54	72	24	12	48
$\div 6$										

 Divide each of the numbers in the top row by 6.

A. 

	42	60	18	36	30	54	72	24	12	48
$\div 6$	7	10	3	6	5	9	12	4	2	8

a) 

	16	28	8	40	24	20	4	32	36	44
$\div 4$	4									

b) 

	99	66	33	121	44	88	77	110	11	22
$\div 11$										

c) 

	40	90	120	30	100	10	70	50	80	60
$\div 10$										

d) 

	56	14	28	70	63	7	21	84	42	77
$\div 7$										

e) 

	120	48	36	24	144	60	12	96	84	72
$\div 12$										

## Skill 4.2 Dividing whole numbers from 1 to 12 into negative numbers.

MM4.2 1 1 2 2 3 3 4 4  
MM5.1 1 1 2 2 3 3 4 4

- Reword the division by turning it into a multiplication.
- Use a multiplication table.
- Convert the multiplication back to a division.
- Then apply the division rules.

### Division Rules

different signs: positive  $\div$  negative = negative  
negative  $\div$  positive = negative

Example: How many 5's go into negative 30?  
 $-30 \div 5 = ?$

Reworded: What number multiplied by 5 gives  
negative  $-30$ ?

$$5 \times ? = -30$$

From the multiplication table,  $5 \times -6 = -30$

$$\text{So } -30 \div 5 = -6$$

MULTIPLICATION TABLE

$\times$	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

Q.

	-30	-55	-25	15	35	40	50	-45	-20	60
$\div 5$										

Divide each of the numbers in the top row by 5.

A.

	-30	-55	-25	15	35	40	50	-45	-20	60
$\div 5$	-6	-11	-5	3	7	8	10	-9	-4	12

Use the rule:  
A negative number divided by a positive number results in a negative number.

a)

	12	21	-6	30	15	-18	36	-33	3	-24
$\div 3$	4									

b)

	5	-30	10	45	-35	40	-25	60	15	-20
$\div 5$										

c)

	-44	88	121	-55	22	77	-33	11	-66	99
$\div 11$										

d)

	56	72	-8	-40	32	16	64	-24	48	-80
$\div 8$										

e)

	66	-48	36	-24	18	60	-12	30	54	-42
$\div 6$										

f)

	108	-90	-9	-45	63	36	-72	99	-18	27
$\div 9$										