

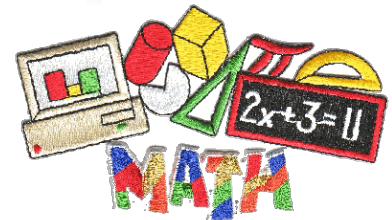
Sept. 7,8, 9 2016

Row 1				2			
Row 2			2	2			
Row 3		2		4		2	
Row 4		2	6	6	2		
Row 5	2	8	12	8	2		
Row 6	2	10	20	20	10	2	
Row 7	?	?	?	?	?	?	?

# Unit 1

# Patterns & Relations

I	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100





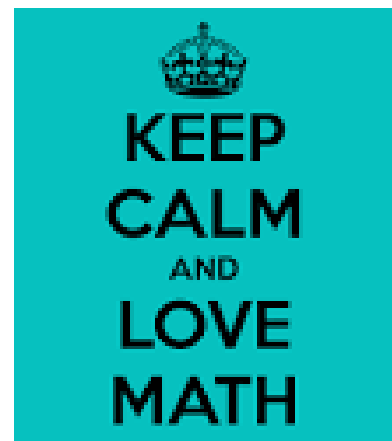
Each day we will start the same

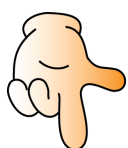
1) Please have your page ready with the date and numbered 1 - 10 along your margin - like this

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

This will be for mental math.

- 1  $6 + 6$
- 2  $38 + 7$
- 3  $10 - 6$
- 4  $46 - 8$
- 5  $8 \times 3$
- 6  $56 \times 10$
- 7  $64 \div 8$
- 8  $1/2$  of 10
- 9 50% of 30
- 10  $0.5 + 1.0$





Divisible



factor

even number



multiple

odd number



sum



divisible - when a number can be divided by another and there is no remainder

divisibility rules - rules that we use to see if a number is divisible by another number.

I'm 2 and I'll be your friend,  
as long as an even #'s on the end.

1010

122

4

90

5006

88

The **5** is my biggest hero,  
he has to end in 5 or 0.

565

80000

90

25

I'm ☹️ and this you should know,  
I always end in a big fat 0!

100

20

7000

102000000

1000



Which of these numbers are divisible by 2? By 5? By 10?

How do you know?

• 78

• 27

• 35

• 410

• 123

• 2100

• 4126

• 795

You already know

Pattern and Divisibility Rules

Divisible by 2 - How do you know if a number is divisible by 2?

It is divisible by 2 if it ends with 2,4,6,8,or 0

Divisible by 5 -

A number is divisible by 5 if it ends with a 5 or a 0.


Divisible by 10 -

A number is divisible by 10 if it ends with a 0.



LOVE  
Math!

How to discover the divisibility rule for 4.....

The  won't be such a chore,  
if the last 2 are divisible by 4.

How to discover the divisibility rule for 8....



The last three digits are divisible by 8



**109816** ( $816 \div 8 = 102$ ) **Yes**

Page 10 of your text book

### Explore



You will need a hundred chart numbered 301–400, and three different coloured markers.

- Use a marker. Circle all numbers on the hundred chart that are divisible by 2.  
Use a different marker.  
Circle all numbers that are divisible by 4.  
Use a different marker.  
Circle all numbers that are divisible by 8.  
Describe the patterns you see in the numbers you circled.
- Choose 3 numbers greater than 400.  
Which of your numbers do you think are divisible by 2? By 4? By 8?  
Why do you think so?



You can use patterns to find **divisibility rules** for other numbers.

- All multiples of 10, such as 30, 70, and 260, end in 0.

Any number whose ones digit is 0, is divisible by 10.

- Here are some multiples of 5.  
5, 10, 15, 20, 25, 30, 35, 40, ..., 150, 155, 160, ...  
The ones digits form a repeating pattern.  
The core of the pattern is: 5, 0

Any number whose ones digit is 0 or 5, is divisible by 5.

- Multiples of 2 are even numbers: 2, 4, 6, 8, 10, ...  
All even numbers are divisible by 2.

Any number whose ones digit is even, is divisible by 2.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Every multiple of 5 has a ones digit of 0 or 5.

A number that is divisible by 8 is also divisible by 2 and by 4 because  $8 = 2 \times 4$ .  
So, a number divisible by 8 is even.

Another way to check if a number is divisible by 8 is to divide by 4. If the quotient is even, then the number is divisible by 8.

