

Mega Math Card

MULTIPLICATION FACTS

X	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

DIVISIBILITY RULES

- The last digit is even.
- The sum of the digits is divisible by 3.
- The last two digits form a number divisible by 4.
- The last digit is a 5 or a 0.
- The number is divisible by both 3 and 2.
- Double the last digit and subtract it from the rest of the number. The answer must be 0 or divisible by 7.
- The last three digits are divisible by 8.
- The sum of the digits is divisible by 9.
- The number ends in 0.
- Add every other digit and subtract all the other digits. The answer must be 0 or divisible by 11.
- The number is divisible by both 3 and 4.

ORDER OF OPERATIONS

- 1st Please → ()
- 2nd Excuse → X^2
- 3rd My → $\left[\begin{array}{c} X \\ \div \\ + \\ - \end{array} \right]$
- 4th Aunt → $\left[\begin{array}{c} + \\ - \end{array} \right]$
- Sally → $\left[\begin{array}{c} + \\ - \end{array} \right]$

PLACE VALUE

1	9	8	7	6	5	4	3	2	1	.	1	2	3	4
Billions	100 Millions	10 Millions	Millions	100 Thousands	10 Thousands	Thousands	Hundreds	Tens	Ones		Tenths	Hundredths	Thousandths	10 Thousandths

COORDINATE PLANE

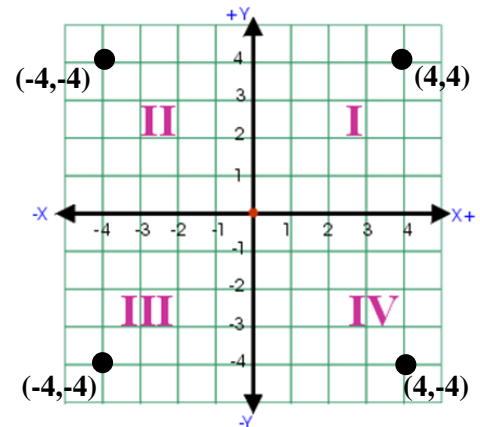
x-axis = Horizontal number line

y-axis = Vertical number line

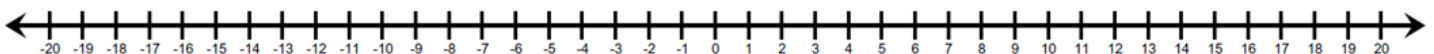
Origin = Center of the coordinate plane with the coordinates of (0,0).

Ordered pairs - Identifies the locations of points on the plane with x and y values (x,y) or (2,1)

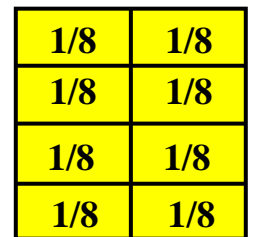
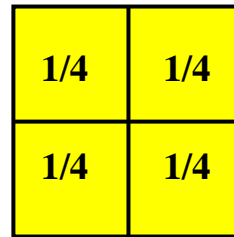
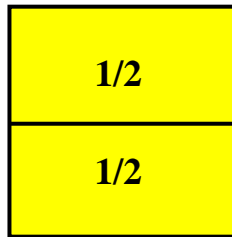
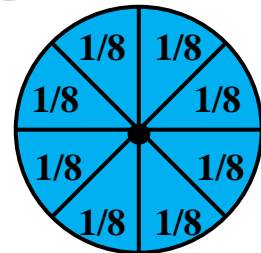
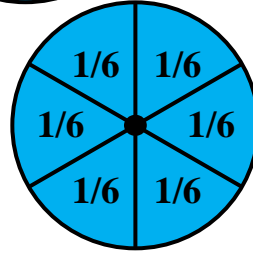
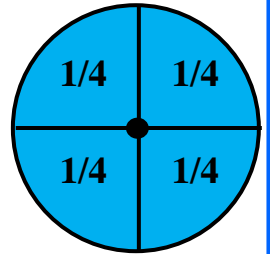
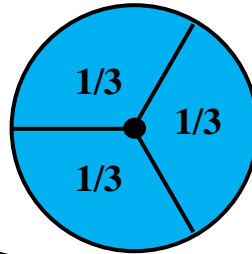
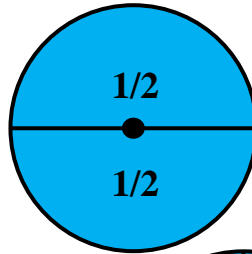
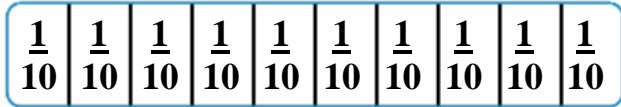
Quadrant - One quarter of the coordinate plane



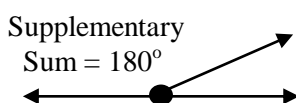
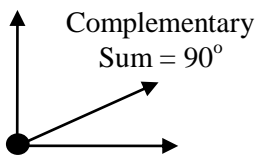
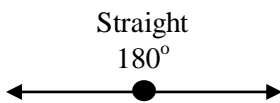
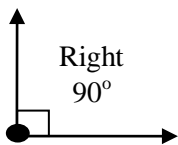
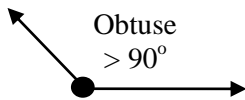
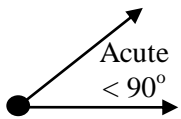
NUMBER LINE



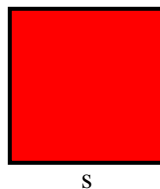
FRACTIONS



ANGLES



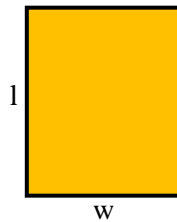
SHAPES & FORMULAS



Square

$$P = 4s$$

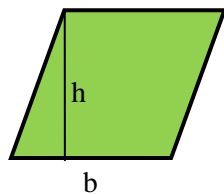
$$A = s^2$$



Rectangle

$$P = 2l + 2w$$

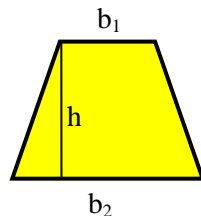
$$A = l \times w$$



Parallelogram

$$P = \text{Sum of sides}$$

$$A = b \times h$$



Trapezoid

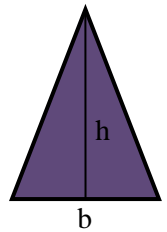
$$P = \text{Sum of sides}$$

$$A = \frac{1}{2} \times h \times (b_1 + b_2)$$

Triangle

$$P = a + b + c$$

$$A = \frac{1}{2} b \times h$$

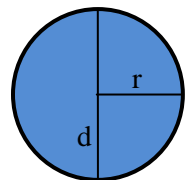


Circle

$$\Pi = 3.14$$

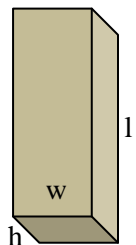
$$C = 2\Pi r$$

$$A = \Pi r^2$$



Rectangular Solid

$$V = l \times w \times h$$



Cylinder

$$V = \Pi r^2 \times h$$

