

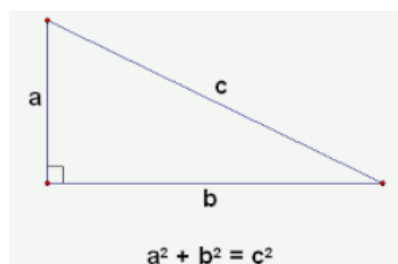
Grade 8 FAST—Brain Dump Suggestions

Coordinates

$$(x, y)$$

↔ ↓

Pythagorean Theorem



Laws of Exponents

$$a^m \cdot a^n = a^{m+n}$$

$$(a^m)^n = a^{m \cdot n}$$

$$\frac{a^m}{a^n} = a^{m-n}$$

$$\left(\frac{a}{b}\right)^{-1} = \frac{b^1}{a^1}$$

$$a^0 = 1$$

$$a^{-1} = \frac{1}{a^1}$$

Inequalities and Graphing Inequalities

> Greater Than ○ →

< Less Than ← ○

≥ Greater Than or Equal To ● →

≤ Less Than or Equal to ← ●

****Inequality sign flips when × or ÷ by a negative number****

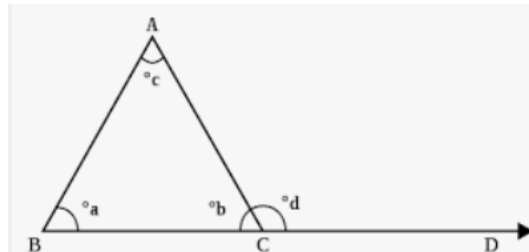
	a^2	a^3
1	1	1
2	4	8
3	9	27
4	16	64
5	25	125
6	36	
7	49	
8	64	
9	81	
10	100	

$$\text{Scale Factor} = \frac{\text{New}}{\text{Original}}$$

$$\text{Sum of Interior Angles} = 180(n - 2)$$

Exterior Angle Theorem

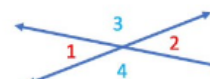
$$a^\circ + c^\circ = d^\circ$$



Adjacent Angles



Vertical Angles



$$1 = 2 \text{ and } 3 = 4$$

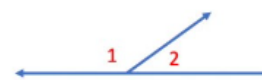
Complementary Angles



$$1 + 2 = 90^\circ$$

Supplementary Angles

"straight angle"



$$1 + 2 = 180^\circ$$