## Notes - Section 1.3 - Drawing a Diagram (Grade 6)

$\underline{\text { Similar Figures - Two geometric figures are similar if they have the same shape but are different }}$ sizes.

Polygon - A closed figure ( 3 or more sides) made of straight lines.
Naming Polygons

| Number of Sides | Name of Polygon |
| :---: | :---: |
| 3 | Triangle |
| 4 | Quadrilateral |
| 5 | Pentagon |
| 6 | Hexagon |
| 7 | Heptagon |
| 8 | Octagon |
| 9 | Nonagon |
| 10 | Decagon |

Perimeter - The perimeter of a polygon is the distance around the polygon. You can find the perimeter of any polygon by adding the lengths of all of its sides. You can also find the perimeter of some polygons by using formulas.

## Perimeter Formulas:

$\checkmark$ Perimeter of a Triangle: $\mathrm{P}=\mathrm{a}+\mathrm{b}+\mathrm{c}$ (where $\mathrm{P}=$ perimeter and $\mathrm{a}, \mathrm{b}$, and c are the lengths of the sides)
$\checkmark$ Perimeter of a Square: $\mathrm{P}=4 \mathrm{~s}$ (where $\mathrm{s}=$ the length of each side)
$\checkmark$ Perimeter of a Rectangle: $\mathrm{P}=2 \mathrm{l}+2 \mathrm{w}$ (where $\mathrm{l}=$ length and $\mathrm{w}=$ width)

Area - The area of a polygon is the amount of surface that a polygon covers. All of the space inside of a polygon (object).

## Area Formulas:

$\checkmark$ Area of a Square: $\mathrm{A}=\mathrm{s}^{2}$ (where $\mathrm{A}=$ area and $\mathrm{s}=$ length of each side)
$\checkmark$ Area of a Rectangle: A = lw (where l = length and $\mathrm{w}=$ width)
$\checkmark$ Area of a Triangle: $\mathrm{A}=1 / 2 \mathrm{bh}$ (where $\mathrm{b}=$ base and $\mathrm{h}=$ height)

