**Mini-Lesson #1 –Two-Dimensional Geometry (2-D Geometry – Math 7 PLUS )**

Vocabulary: Perimeter Area perpendicular

 Circumference Diameter Radius

Part I: Around the room activity with Shapes

Part II: Finding Area and Perimeter of 2-Dimensional Shapes

|  |
| --- |
| **Perimeter****To find perimeter: Add up lengths of ALL sides of figure**10 cm1. 2) 7cm

 2cm6 cm4 cm 5cm 3cm  4cm8 cm  |
| **Steps to Follow when using a formula*** F - Write formula
* S - Substitute numbers for variables
* A = Answer
 | **Important Features to remember*** Height and base are perpendicular (Look for the *Right Angle* symbol to find height and base)
 |
| **Area of Rectangles and Squares**:  **A = bh** (base \* height) OR **A = lw** (length \* width) Ex: 1) 6in 2) 8 cm 12 in |
| **Area of Triangles: Formula: Area of Triangles =** **4 in**1. 2.

**14 innn==============---------****24 cm****18 cm****30 cm****12 in** |
| **Area of Trapezoids****base****base****height****height****base****base****Area of a Trapezoid = ½ (b + b) h****18 cm****14 in**1. **2.**

**14 cm****12.5 cm****7 in****22.5 cm****20in** |
| **Circle Information****Pi (π) = 3.14 or** $\frac{22}{7}$**Pi is irrational**Ex:  Diameter radius Center |
| **Circumference of Circles:**Formula: C = 2πr OR C = πd1.
2. 2) A circle with the radius of 9.7 m.
3.

10 cm | **Area of circle Formula:** A = πr21. 2)

3) Find the area of a circle with a radius of 7.2 feet.1. Find the area of a circle with a diameter of 11 in. Use $\frac{22}{7}$ for π
 |

Part III: Find Area of Irregular Shapes

|  |  |
| --- | --- |
| **Find the Area of the Shaded Regions.** |  |
|  |  |
| **Find the Area and Perimeter.**  | **18 in****18 in** |
| ***The shapes are squares*** | **20in****20in** |

Part III: Find Area of Irregular Shapes

|  |  |
| --- | --- |
| **Find the Area of the Shaded Regions.** |  |
|  |  |
| **Find the Area and Perimeter.**  | **18 in****18 in** |
|  | **20in****20in** |