1. **Notes**

|  |  |  |
| --- | --- | --- |
| **Volume**: Is the amount of space an object takes  **Prisms**  Bases  Height  Bases  Height  This is a **rectangular prism** because the base is a rectangle This is a **Triangular prism** because the base is a Triangle   |  | | --- | | **Formula for Volume of a Prism**  **V** = **BH** |   Where B=Area of the base based on the shape  **\*\*H= The distance between the two bases**    **Cylinders radius diameter**     |  | | --- | | **V= r2h** |   **Height Height** (**h) is the height between the two circles**    **\*\*r= radius starts from center \*\*d= diameter is the length of the line through the center from one edge of the circle to the other: d=2.r** |

1. **EXAMPLES:**

**1-**

V= BH

Bases

Height =

\*\*\*B= Area of the rectangle= b.h= 5x6= 30cm2

= **4cm**



H= 4cm

5cm **V= 30x4=120cm3**

**6 cm**

**V= BH**

2- \*\*\*B= Area of the triangle (base) = ½ b.h=**1/2 (6x2)=6cm2**

Bases

Bases

Height

H=4cm

**2 cm**

= **4cm**

**V=6x4=24cm3**

**6 cm**

|  |
| --- |
| **V= r2h** |

**Volume of a cylinder:** r2 is the area of the circle3**. \*\*r= radius starts from center**

5**cm** \*\***h is the height between the two circles**

**25 cm**

V=  **(5)2.25=625=1962.5 cm3**

|  |
| --- |
| **V= r2h** |

**6cm= diameter**

6 cm

8 cm

**r=d/2 \*\*r= 6cm/2=3cm**

4. V=  **( 3 )2.8== 226.08cm3**

\*\*\*\***Video Link that gives more examples and explain the concept if you need it:**

<https://www.youtube.com/watch?v=ju9dCnQoqgY>