

Geometry: A Complete Course (with Trigonometry)

Module A - Course Notes

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VideoText *Interactive*

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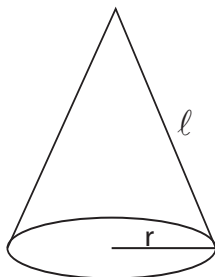
Measuring Pyramids (cont.)

Surface Area of a Right Square Pyramid

$$\begin{aligned} \text{Total Area (T.A.)} &= \text{Lateral Area (L.A.)} + \text{Base Area (B.A.)} \\ &= \left[\begin{array}{l} \text{Sum of the areas} \\ \text{of the faces} \end{array} \right] + \left[\text{area of the base} \right] \end{aligned}$$

$$\text{Total Area (T.A.)} = \frac{1}{2} \cdot s \cdot \ell \cdot 4 + s^2$$

Surface Area of a Right Circular Pyramid (cone)



$$\begin{aligned} \text{Total Area (T.A.)} &= \text{Lateral Area (L.A.)} + \text{Base Area (B.A.)} \\ &= \frac{1}{2} \cdot C \cdot \ell + \pi r^2 \end{aligned}$$

$$\text{Total Area (T.A.)} = \frac{1}{2} \cdot \pi \cdot d \cdot \ell + \pi r^2$$

Applications of Inductive Reasoning

**Find the sum of the
1st 1000 positive integers**

1, 2, 3, 4,...997, 998, 999, 1000

$$1 + 1000 = 1001$$

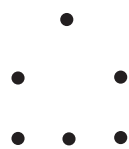
$$2 + 999 = 1001$$

$$3 + 998 = 1001$$

⋮

$$500 \cdot 1001 = 500,500$$

**Into how many parts is a line divided, if
78 points are placed on the line**



1 point = 2 parts

2 points = 3 parts

3 points = 4 parts

⋮

78 points = 79 parts