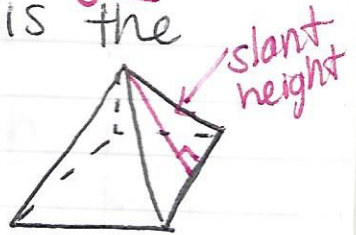


9.2 Surface Area of Pyramids

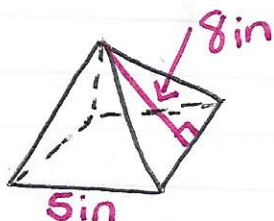
EQ: How can you find the surface area of a pyramid?

Regular pyramid: base is a regular polygon. The lateral faces are all triangles. The height of each triangle is the slant height.

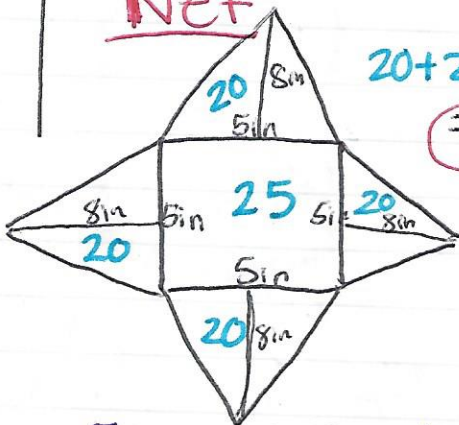
Formula: area of base + area of lateral faces



Example 1 Square pyramid



Net



List

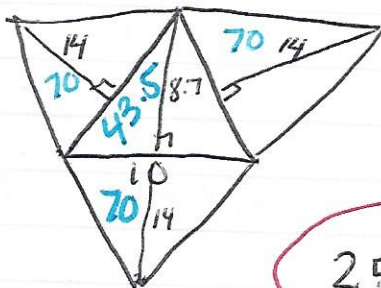
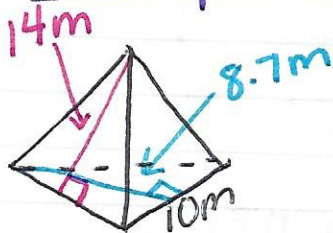
$$\text{Base: } 5 \times 5 = 25 \text{ in}^2$$

$$\text{Lateral faces: } \frac{8 \times 5}{2} = \frac{40}{2} = 20$$

$$+ \begin{array}{r} 20 \\ 20 \\ 20 \end{array}$$

$$\hline 105 \text{ in}^2$$

Example 2: Triangular Pyramid



$$\text{Base: } \frac{10 \times 8.7}{2}$$

$$= 43.5 \text{ m}^2$$

$$\text{L.F. (x3): } \frac{10 \times 14}{2} = 70 \text{ m}^2$$

$$+ \begin{array}{r} 70 \\ 70 \end{array}$$

$$\hline 253.5 \text{ m}^2$$