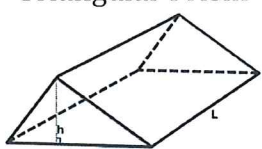
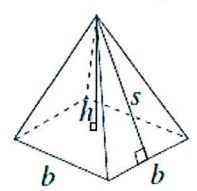
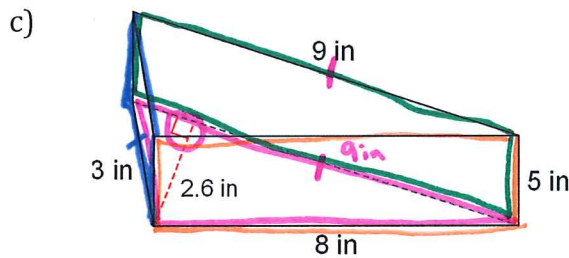


3.2 Surface Areas of Prisms and Pyramids – Part 2

3D Figure	Surface Area	What shapes are the faces?
 <p>Triangular Prism</p>	$SA = \text{sum of areas of all faces}$	2 matching triangles 3 Rectangles (may all be different)
 <p>Square-Based Pyramid</p>	$SA = \text{sum of areas of all faces}$ OR $SA = b^2 + 2bs$	1 square 4 matching triangles

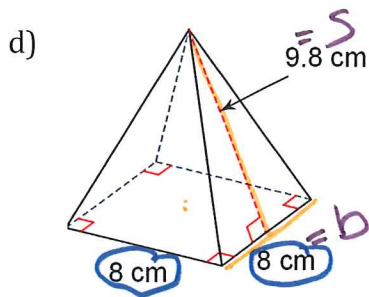
Ex. 1



$$2 \Delta's : 2 \times \frac{bh}{2} = 2 \times \frac{9 \times 2.6}{2} = 23.4 \text{ in}^2$$

$$3 \square's : \begin{aligned} 3 \times 5 &= 15 \text{ in}^2 \\ (A=lw) \quad 8 \times 5 &= 40 \text{ in}^2 \\ 9 \times 5 &= 45 \text{ in}^2 \end{aligned}$$

$$\text{Total SA} : 23.4 \text{ in}^2 + 15 \text{ in}^2 + 40 \text{ in}^2 + 45 \text{ in}^2 = \boxed{123.4 \text{ in}^2}$$



$$\text{Base} : 8 \times 8 = 64 \text{ cm}^2$$

$$4 \Delta's : 4 \times \frac{8 \times 9.8}{2} = 156.8 \text{ cm}^2$$

$$SA = 64 \text{ cm}^2 + 156.8 \text{ cm}^2 = 220.8 \text{ cm}^2$$

Square Pyramid.

$$\text{OR } SA = b^2 + 2bs = 8^2 + 2(8)(9.8)$$

$$= 64 + 156.8 = \boxed{220.8 \text{ cm}^2}$$