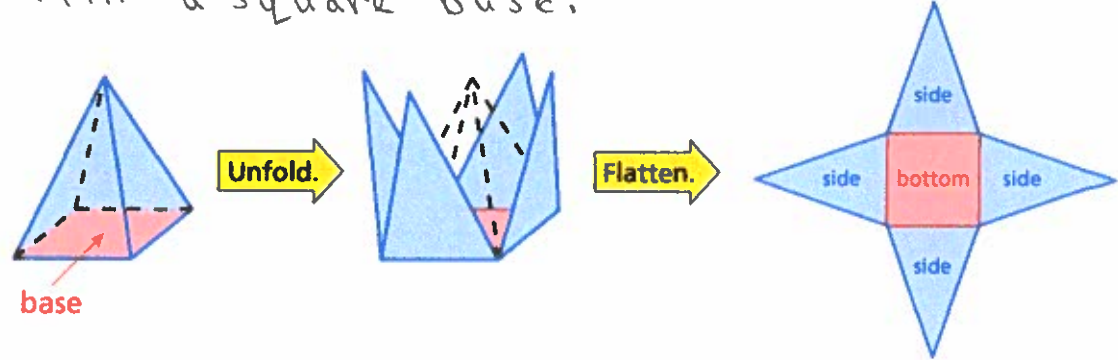


Surface Area of Pyramids

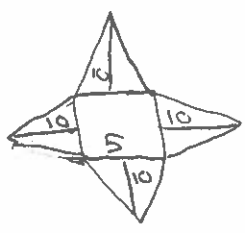
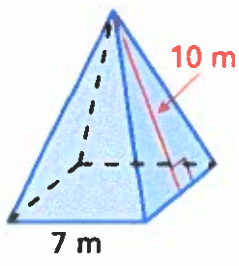
8.3

Essential Question: How can you use a net to find the surface area of a pyramid?

Net of a Square Pyramid A square pyramid is a pyramid with a square base.

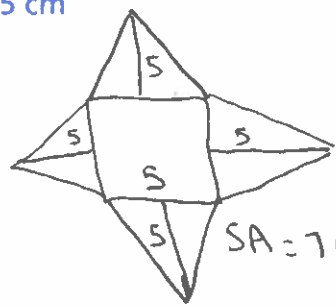
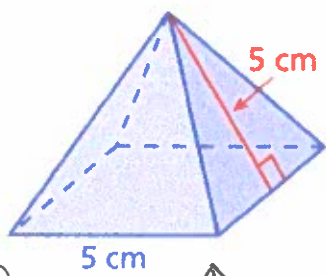


Find the surface area of the square pyramid



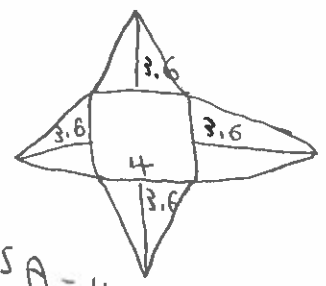
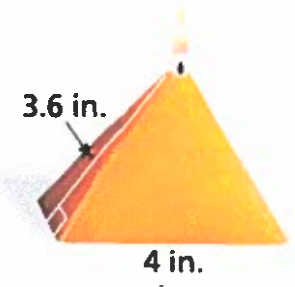
$SA = 189 \text{ m}^2$

$Bottom = 7 \cdot 7 = 49$
 $side = \frac{10(7)}{2} = \frac{70}{2} = 35$
 $side = \frac{10(7)}{2} = \frac{70}{2} = 35$
 $side = \frac{10(7)}{2} = \frac{70}{2} = 35$
 $side = \frac{10(7)}{2} = \frac{70}{2} = 35$



$SA = 75 \text{ cm}^2$

$Bottom = 5 \cdot 5 = 25$
 $side = \frac{5 \cdot 5}{2} = \frac{25}{2} = 12.5$
 $side = \frac{5 \cdot 5}{2} = \frac{25}{2} = 12.5$
 $side = \frac{5 \cdot 5}{2} = \frac{25}{2} = 12.5$
 $side = \frac{5 \cdot 5}{2} = \frac{25}{2} = 12.5$

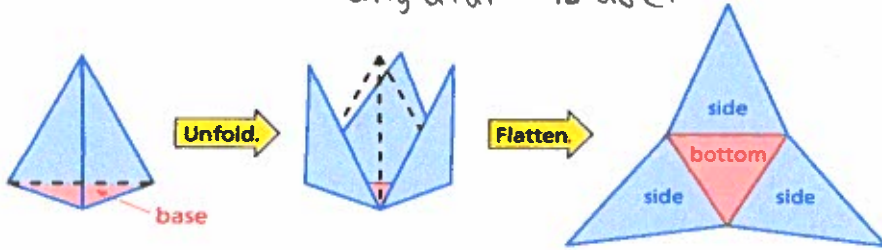


$SA = 44.8 \text{ in}^2$

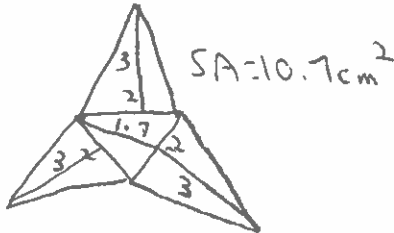
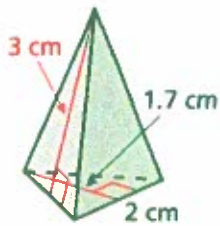
$Bottom = 4 \cdot 4 = 16$
 $side = \frac{4(3.6)}{2} = \frac{14.4}{2} = 7.2$
 $side = \frac{4(3.6)}{2} = \frac{14.4}{2} = 7.2$
 $side = \frac{4(3.6)}{2} = \frac{14.4}{2} = 7.2$
 $side = \frac{4(3.6)}{2} = \frac{14.4}{2} = 7.2$

Net of a Triangular Pyramid

A triangular pyramid is a pyramid with a triangular base.



Find the surface area of the triangular pyramid.



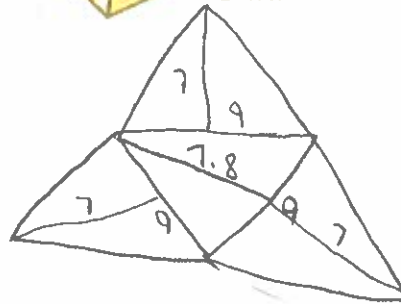
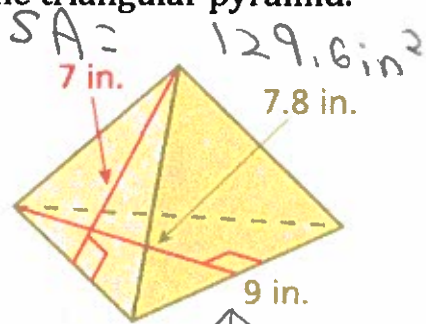
$$SA = 10.7 \text{ cm}^2$$

$$\text{Bottom} = \frac{2(1.7)}{2} = \frac{3.4}{2} = 1.7$$

$$\text{side} = \frac{3 \cdot 2}{2} = \frac{6}{2} = 3$$

$$\text{side} = \frac{3 \cdot 2}{2} = \frac{6}{2} = 3$$

$$\text{side} = \frac{3 \cdot 2}{2} = \frac{6}{2} = 3$$



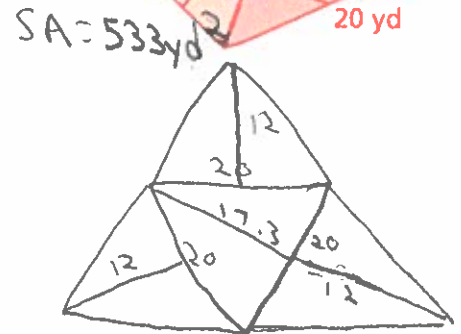
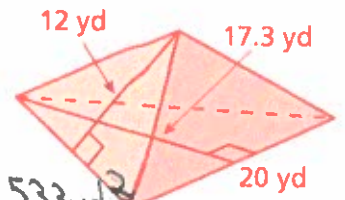
$$SA = 129.6 \text{ in}^2$$

$$\text{Bottom} = \frac{9(7.8)}{2} = \frac{70.2}{2} = 35.1$$

$$\text{side} = \frac{7 \cdot 9}{2} = \frac{63}{2} = 31.5$$

$$\text{side} = \frac{7 \cdot 9}{2} = \frac{63}{2} = 31.5$$

$$\text{side} = \frac{7 \cdot 9}{2} = \frac{63}{2} = 31.5$$



$$SA = 533 \text{ yd}^2$$

$$\text{Bottom} = \frac{20(17.3)}{2} = \frac{346}{2} = 173$$

$$\text{side} = \frac{12(20)}{2} = \frac{240}{2} = 120$$

$$\text{side} = \frac{12(20)}{2} = \frac{240}{2} = 120$$

$$\text{side} = \frac{12(20)}{2} = \frac{240}{2} = 120$$