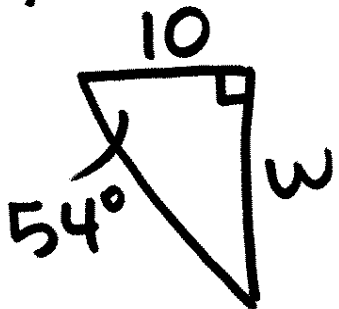


# STUDY GUIDE

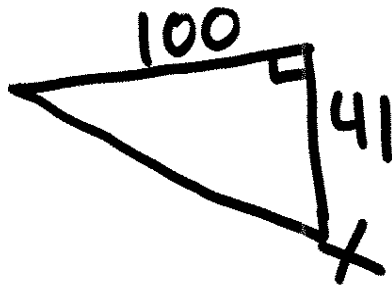
Tangent Ratio

$$\text{TAN} = \frac{\text{opposite}}{\text{adjacent}}$$

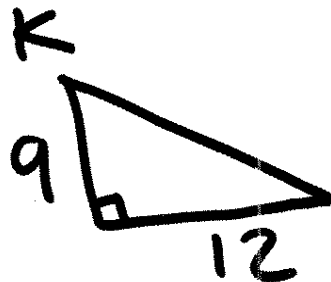
① find the value of  $w$



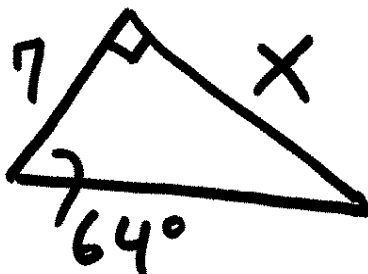
② find  $\angle X$



③ find  $\text{TAN}(K)$

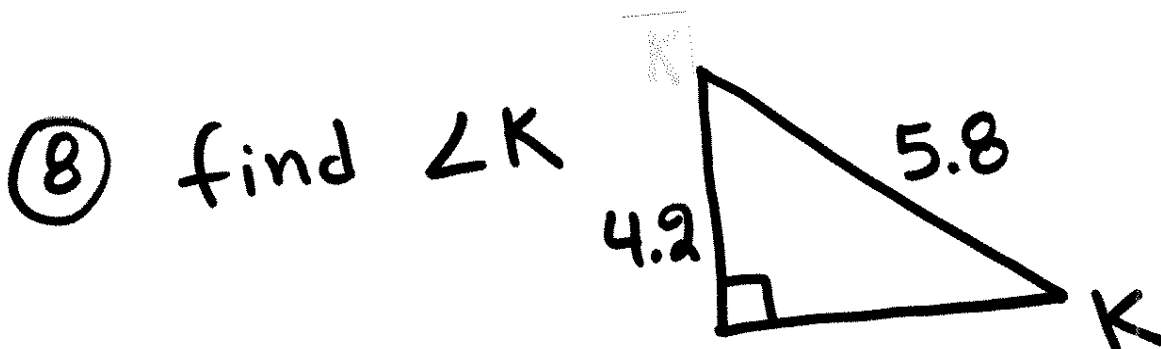
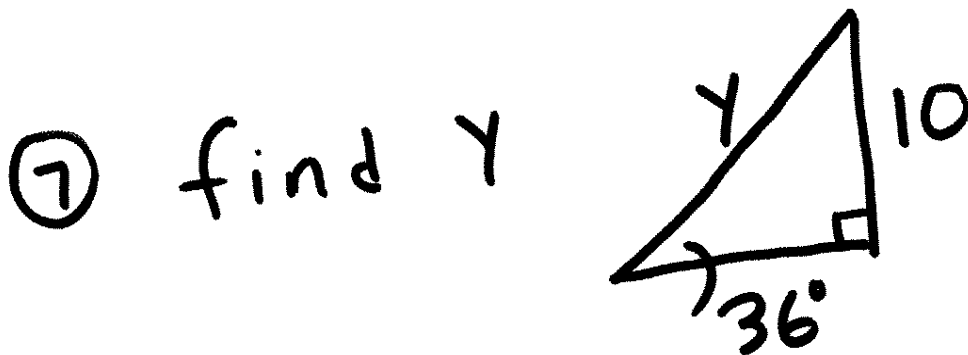
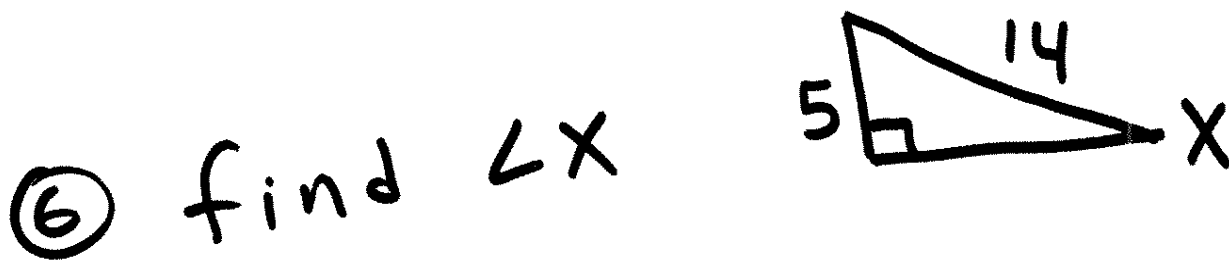
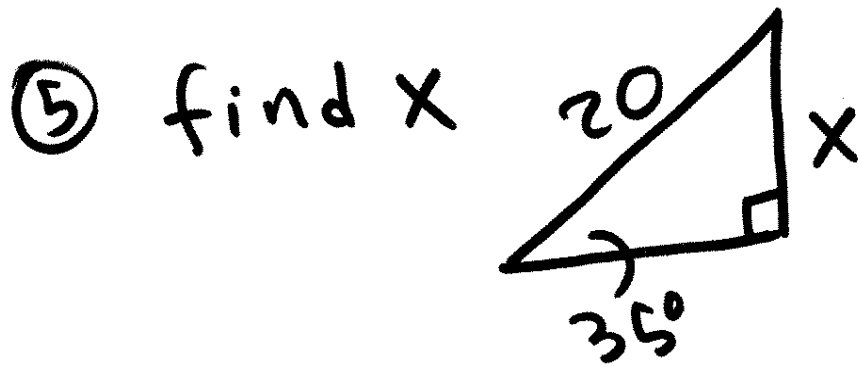


④ find  $x$



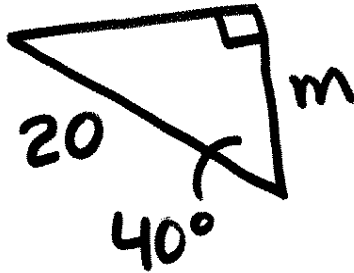
# Sine and Cosine

$$\sin = \frac{\text{opposite}}{\text{hypotenuse}}$$

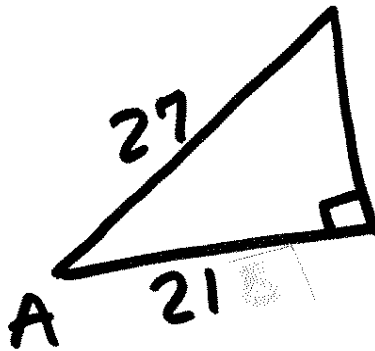


$$\cos = \frac{\text{adjacent}}{\text{hypotenuse}}$$

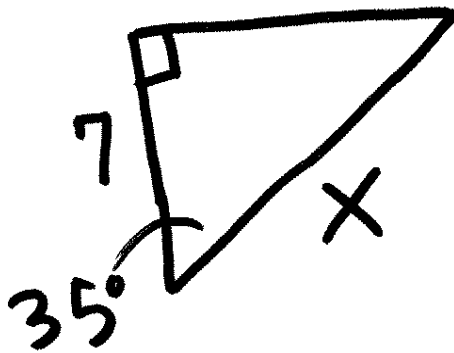
⑨ find  $m$



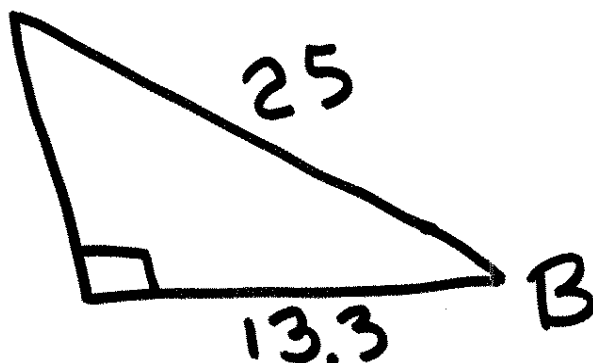
⑩ find  $\angle A$



⑪ find  $x$



⑫ find  $\angle B$

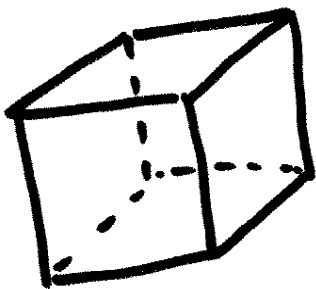


What does SohCahToa stand for?

13

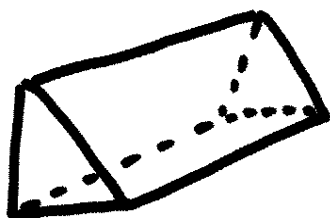
14

Draw the Net of the Prism



15

Draw the Net of the Prism



16

Draw the Net of the Cylinder



$$(9) \cos(40) = \frac{m}{20} \quad m = 20 \cdot \cos(40) = 15.3$$

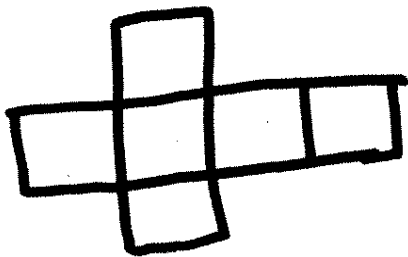
$$(10) \cos(A) = \frac{21}{27} \quad \boxed{2nd} \boxed{\cos} (21/27) = 38.9$$

$$(11) \cos(35) = \frac{7}{x} \quad x = \frac{7}{\cos(35)} = 8.5$$

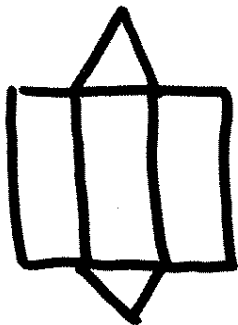
$$(12) \cos(B) = \frac{13.3}{25} \quad \boxed{2nd} \boxed{\cos} (13.3/25) = 57.8$$

(13) Soh  $\sin = \frac{\text{opposite}}{\text{hypotenuse}}$   
 Cah  $\cos = \frac{\text{adjacent}}{\text{hypotenuse}}$   
 Toa  $\tan = \frac{\text{opposite}}{\text{adjacent}}$

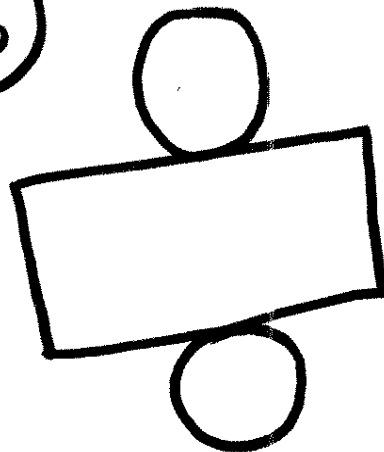
(14)



(15)



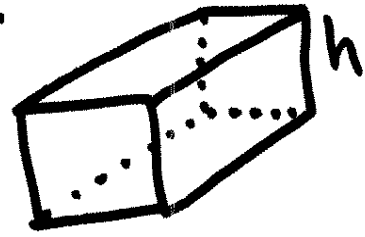
(16)



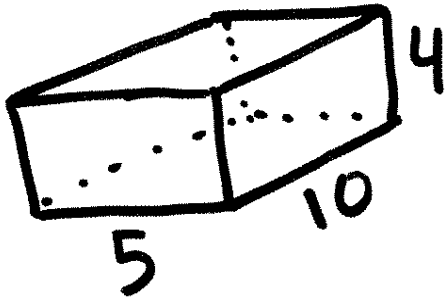
# Surface area of Prisms

$$L.A. = ph$$

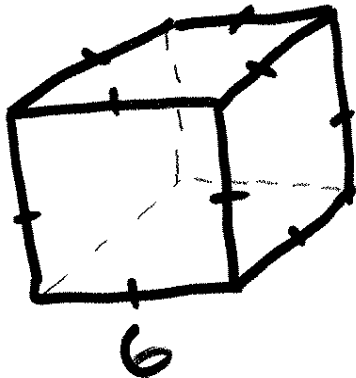
$$S.A. = L.A. + 2B$$



①7 find L.A. & S.A.



①8 find L.A. & S.A.



# Surface area of cylinders

$$L.A. = 2\pi r h$$

$$S.A. = L.A. + 2B$$

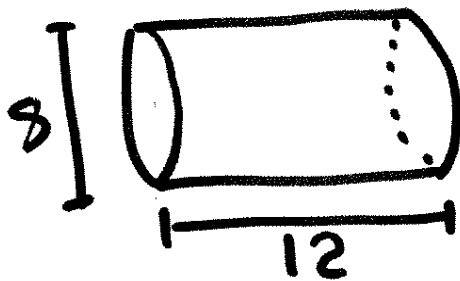
$$B = \pi r^2$$

$$S.A. = 2\pi r h + 2\pi r^2$$

①9 find L.A. & S.A.

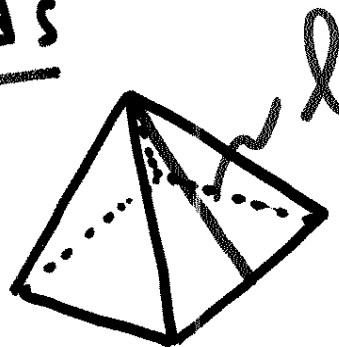


②0 find L.A. + S.A.



# Surface area of Pyramids

$$L.A. = \frac{1}{2} P l$$

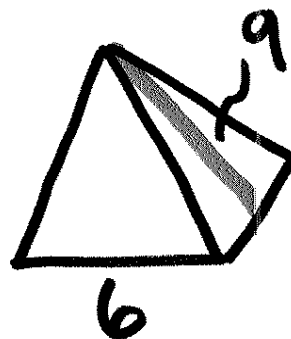


$P$  = Perimeter of the base  
 $l$  = slant height

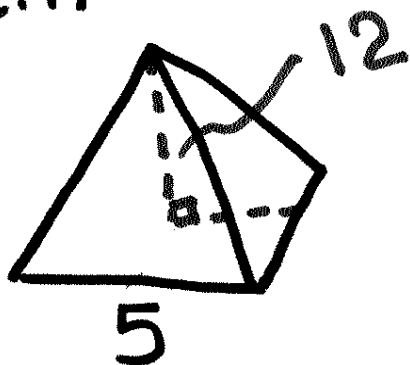
$$S.A. = L.A. + B$$

$B$  = Area of the Base

②① find L.A. + S.A.



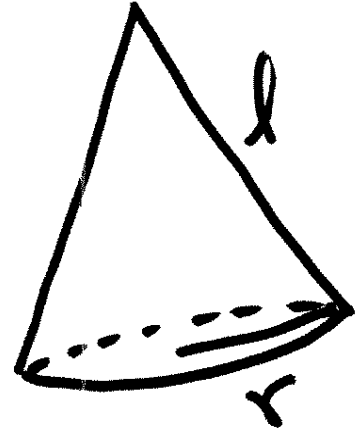
②② find L.A. + S.A.



# Surface area of cones

$$L.A. = \frac{1}{2} \cdot 2\pi r \cdot l$$

$$= \pi r \cdot l$$

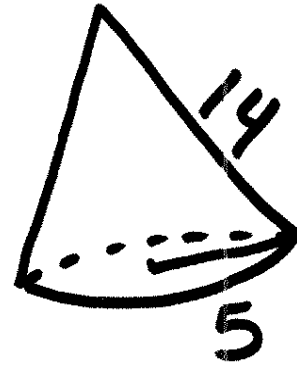


$$S.A. = L.A. + B$$

$$B = \pi r^2$$

$$S.A. = \pi r \cdot l + \pi r^2$$

②③ find L.A. + S.A.



②④ find L.A. + S.A.

