7. Use the dimension sliders to complete the steps for each:

a. The volume of a **Triangular Prism** whose base = 10m and height = 6m is:

$V = \frac{1}{2}abh$

$V = \frac{1}{2}(\underline{\quad})(\underline{\quad})(\underline{\quad})$

$V = (\underline{\quad})(\underline{\quad})$

$V = \underline{\quad} \, m^3$

b. The surface area of a **Cylinder** whose radius is 7m and height is 7m is:

$SA = \pi r^2 + \underline{\quad} + \underline{\quad}$

$SA = 3.14(\underline{\quad})^2 + 3.14(\underline{\quad})^2 + 3.14(\underline{\quad})(\underline{\quad})$

$SA = \underline{\quad} \, m^2$

c. The volume of a **Rectangular Pyramid** whose length = 7m, width = 3m and height = 9m is:

$V = \frac{1}{3} \underline{\quad}$

$V = \frac{1}{3}(\underline{\quad})(\underline{\quad})(\underline{\quad})$

$V = \frac{1}{3}(\underline{\quad})(\underline{\quad})$

$V = \frac{1}{3}(\underline{\quad})$

$V = \underline{\quad} \, m^3$

d. The surface area of a **Cone** whose radius = 9m and height = 4m is:

$SA = \underline{\quad} + \pi k r$

$SA = \underline{\quad}(9)^2 + (\underline{\quad})(\underline{\quad})(9)$

$SA = \underline{\quad} + \underline{\quad}$

$SA = \underline{\quad} \, m^2$

8. The surface area of any shape is found by _____ together the areas of each of the
   (adding/multiplying)
   surfaces of the shape.

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9. When required, refer to the shape(s) listed below to answer the following questions.

i.	Cone	iv.	Rectangular Pyramid
ii.	Rectangular Prism	v.	Triangular Pyramid
iii.	Triangular Prism	vi.	Cylinder

a. How many shapes use $V = \boxed{\text{Area of Base}} \times \boxed{h}$ to calculate the volume? $\underline{\quad}$
   (1/2/3)

   The shapes are _____ .

b. How many shapes use $V = \frac{1}{3}\boxed{\text{Area of Base}} \times \boxed{h}$ to calculate the volume? $\underline{\quad}$
   (1/2/3)

   The shapes are _____ .

c. The shapes using the volume formula $V = \frac{1}{3}\boxed{\text{Area of Base}} \times \boxed{h}$ all have a "top" that is a

   $\underline{\quad}$.
   (flat surface/point)

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