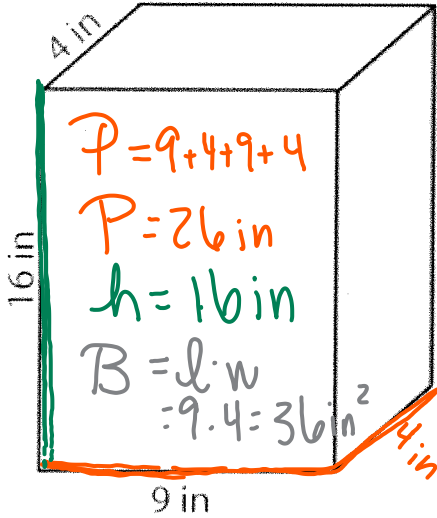


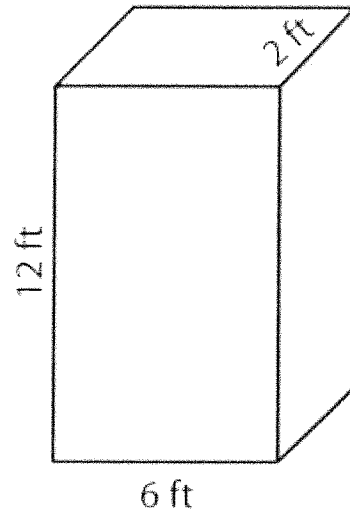
Pre-Algebra Chapter 13 Worksheet: Surface Area of 3-D Shapes

Find the surface area for each figure below. You MUST show your formula. Remember units!!

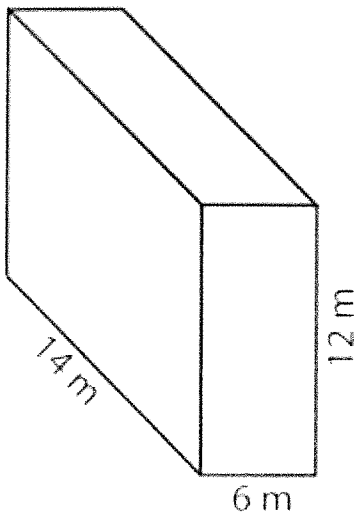
1. Prism $T = Ph + 2B$
 $= (26)(16) + 2(36)$



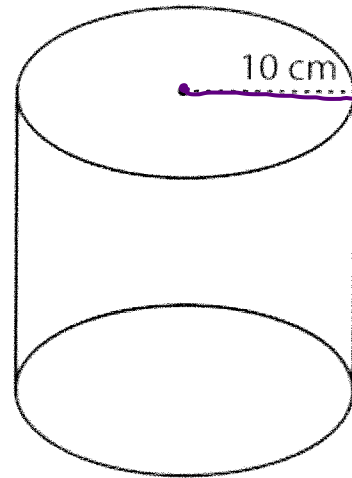
$416 + 72$
 488 in^2



2.



4. cylinder $T = 2\pi r h + 2\pi r^2$
 $T = 2(3.14)(10)(16)$



$+ 2(3.14)(10)^2$
 $= 1004.8 + 628$
 $T \approx 1632.8 \text{ cm}^2$

5. pyramid $T = \frac{1}{2}Pl + B$ 7.

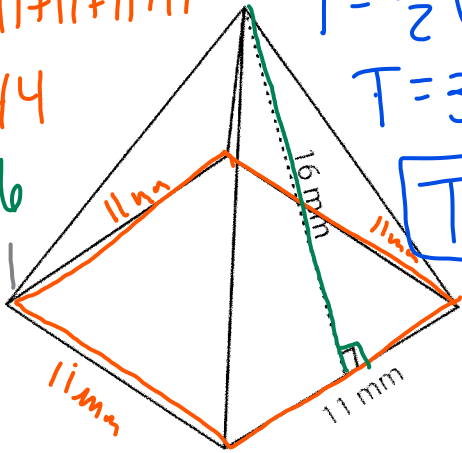
$P = 11 + 11 + 11 + 11$

$P = 44$

$l = 16$

$B = 11 \cdot 11$

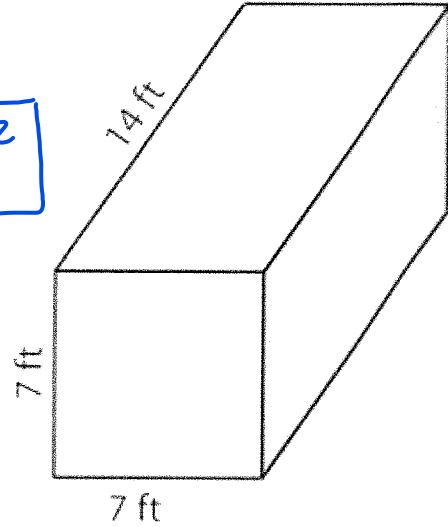
$B = 121$



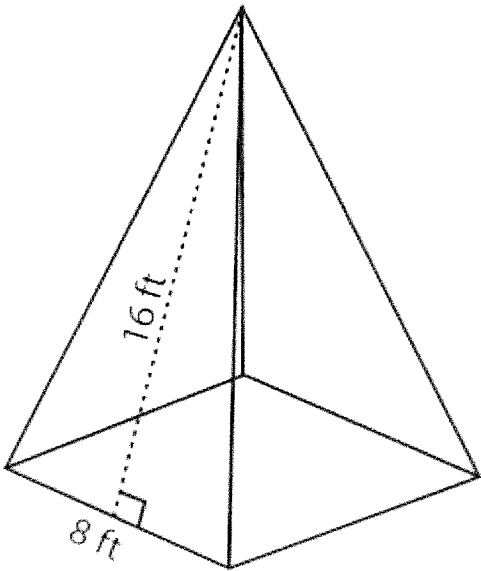
$T = \frac{1}{2}(44)(16) + 121$

$T = 352 + 121$

$T = 473 \text{ mm}^2$



6.



8. cone $T = \pi r l + \pi r^2$

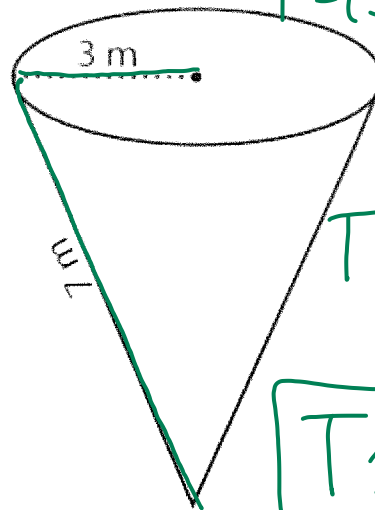
$T = (3.14)(3)(7)$

$+ (3.14)(3)^2$

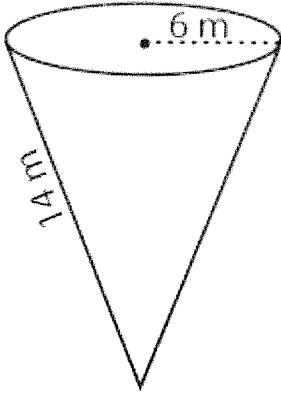
$T = 65.94 +$

28.26

$T \approx 94.2 \text{ m}^2$



9.



11. triangular prism

$$P = 13 + 13 + 10$$

$$P = 36$$

$$h = 14$$

$$B = \frac{bh}{2} = \frac{10 \cdot 12}{2} = \frac{120}{2}$$

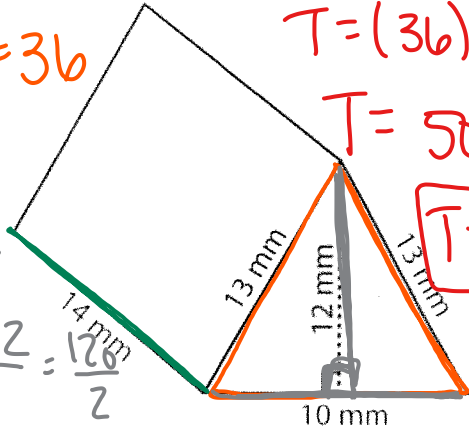
$$B = 60$$

$$T = Ph + 2B$$

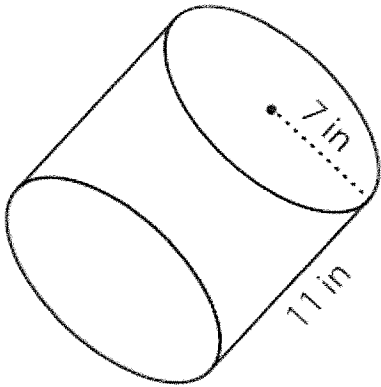
$$T = (36)(14) + 2(60)$$

$$T = 504 + 120$$

$$T = 624 \text{ mm}^2$$



10.



12. triangular prism

$$P = 12 + 9 + 15$$

$$P = 36$$

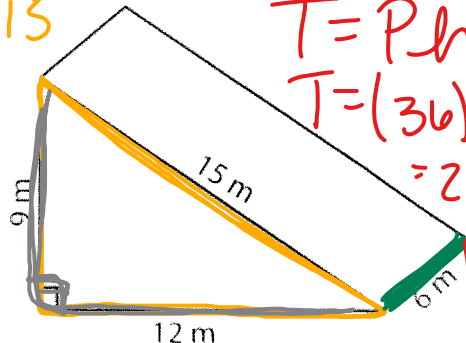
$$h = 6$$

$$B = \frac{bh}{2} = \frac{9 \cdot 12}{2} = \frac{108}{2} = 54$$

$$T = Ph + 2B$$

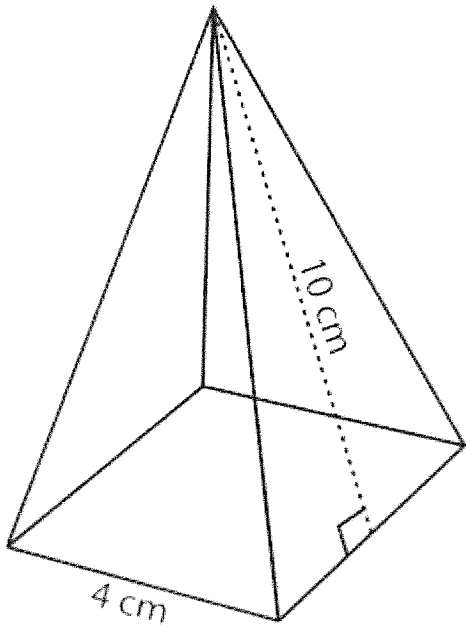
$$T = (36)(6) + 2(54) = 216 + 108$$

$$T = 324 \text{ m}^2$$



Pre-Algebra Surface Area of 3-D Shapes Worksheet

13.



14.

