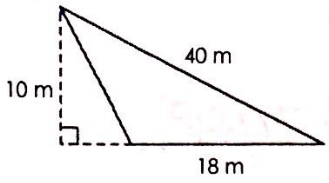
12)



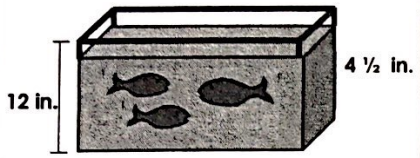
$A = \frac{1}{2}bh$

$A = \frac{1}{2}(18)(10)$

$A = 90$

Area: $90m^2$

13) A fish tank is shown below. How many cubic inches of water can fit inside the tank?



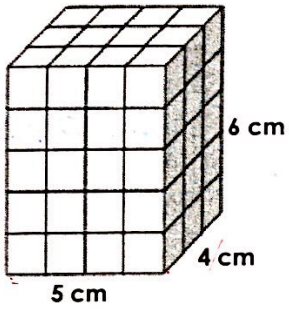
$V = l \cdot w \cdot h$

$V = 10 \cdot 4\frac{1}{2} \cdot 12$

$V = \frac{10}{1} \cdot \frac{9}{2} \cdot \frac{12}{1}^{6}$

Volume: $540in^3$

14)



F: $A = bh$ $A = 5 \cdot 6 = 30$ B: 30

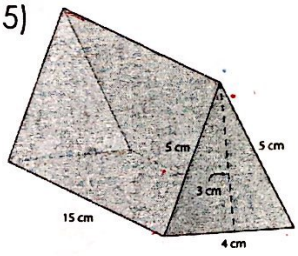
S: $A = bh$ $A = 4 \cdot 6 = 24$ S: 24

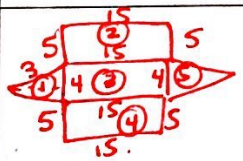
T: $A = bh$ $A = 5 \cdot 4 = 20$ B: $= 20$

Total Square cm needed to wrap the outside of the box:

Surface Area: $148cm^2$

15)





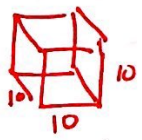
$A_1 = \frac{1}{2}bh$ $A_1 = \frac{1}{2}(4)(3)$ $A_1 = 6$ $A_5 = 6$

$A_2 = b \cdot h$ $A_2 = 5 \cdot 15$ $A_2 = 75$ $A_4 = 75$

$A_3 = b \cdot h$ $A_3 = 4 \cdot 15$ $A_3 = 60$

Surface Area: $222\ cm^2$

15) How much paper is needed to wrap a cube with a side length of 10 cm?



$A = bh$

$A = 10 \cdot 10$

$A = 100$

$600cm^2$

16) Draw 2 different nets that could be folded to make a cube.

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17) A rectangular pool is 10 feet long, 14 ½ feet wide, and 6 feet deep. How many cubic feet of water can it hold?

$V = lwh$

$V = 10 \cdot 14\frac{1}{2} \cdot 6$

$V = \frac{10}{1} \cdot \frac{29}{2} \cdot \frac{6^3}{1}$

$\begin{array}{r} {}^{2}29 \\ \times\ {}^{3}3 \\ \hline 87 \end{array}$

$870 ft^3$

18) Give a real world example of something that relates to volume.

Volume of a box used for shipping.

19) If carpet costs $5 per square yard, how much would it cost to carpet a rectangular room that is 4.5 yards wide and 15 yards long?

$A = bh$

$A = 4.5 \cdot 15$

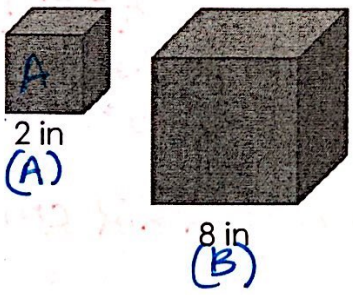
$A = 67.5 yd^2$

$\begin{array}{r} {}^{2}15 \\ 4.5 \\ \hline 75 \\ 600 \\ \hline 67.5 \end{array}$

$\begin{array}{r} {}^{3\ 2}67.5 \\ \times\ \ 5 \\ \hline 337.5 \end{array}$

$337.50

20) How many 2 in cubes can fit inside an 8 in cube?



$V_A = 2 \cdot 2 \cdot 2$

$V_A = 8$

$V_B = 8 \cdot 8 \cdot 8$

$V_B = 512$

$\begin{array}{r} {}^{3}64 \\ \times\ \ 8 \\ \hline 512 \end{array}$

$8\overline{)512}$ $\quad 64$

48

32

64 cubes fit inside the 8in cube.

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