U7L3 Surface Area of Prisms

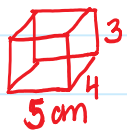
June-01-15 10:02 AM

June 1, 2015

A) Review

$V = (L \times W) \times H$

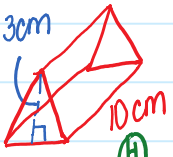
1)



$V = 5 \times 4 \times 3$

$V = \boxed{60}\ cm^3$ ✓

2)



H in between two triangles

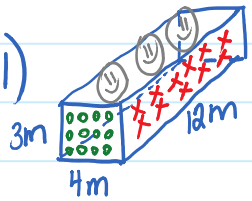
$V = \left(\frac{b \times h}{2}\right) \times H$

$V = \left(\frac{5 \times 3}{2}\right) \times 10$

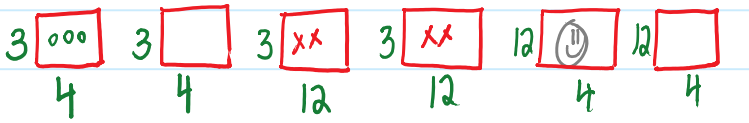
$V = \boxed{75}\ cm^3$ ✓

B) Surface Area:

Ex 1)



sides = 6



$A = L \times W$ $= 3 \times 4$ $= \boxed{12}$

$A = \boxed{12}$

$A = L \times W$ $= 3 \times 12$ $= \boxed{36}$

$A = \boxed{36}$

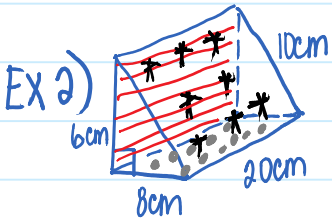
$A = L \times W$ $= 4 \times 12$ $= \boxed{48}$

$= \boxed{48}$

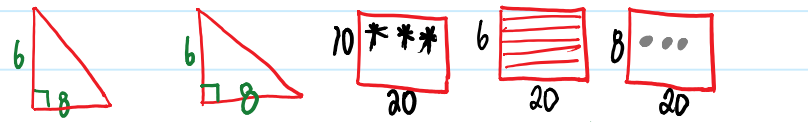
SA = Add six sides

$= \boxed{192\ m^2}$

Ex 2)



sides = 5



$A = \frac{b \times h}{2}$ $= \frac{6 \times 8}{2}$ $= \boxed{24}$

$A = \boxed{24}$

$A = L \times W$ $= 10 \times 20$ $= \boxed{200}$

$A = L \times W$ $= 6 \times 20$ $= \boxed{120}$

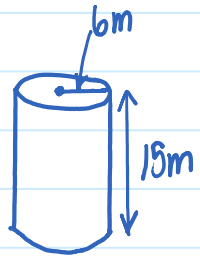
$A = L \times W$ $= 8 \times 20$ $= \boxed{160}$

$= \boxed{24}$ $= \boxed{200}$ $= \boxed{120}$ $= \boxed{160}$

SA = Add five sides

$= \boxed{528 cm^2}$

EX 3)



Formula: $\boxed{SA = 2\pi r^2 + 2\pi rh}$ (area of two circles) (area of wraparound rectangle)

$= (2)(3.14)(6)^2 + 2(3.14)(6)(15)$

$= 226.08 + 565.2$

$= \boxed{791.3\ m^2}$ ✓

if use π button $\boxed{791.7\ m^2}$

Assignment:

U7L3 SA wkst: 1(A,C,F), 3(A,C,G,I), 4 /9 = %