Section 1.3 – Surface Areas of Composite Rectangular Prisms Name: _____

1. Find the surface area of the rectangular prism below:

$$front + Back: 2(45\times 80) = 7200$$

$$Left + Right: 2(35\times 45) = 3150$$

$$35 cm^{-0}p + Bottom: 2(80\times 35) = 5600$$

$$(total Surface Area) T.5.A = 15950 cm^{-2}$$

* In this section, we will look at objects made up of 2 or more rectangular prisms. They are called composite objects. It just means that one rectangular prism is attached to another one. When they do, there will always be an area of overlap.

2. A For the object below, what is the area of the top cube?
S. Acube = 6 (Side Length × side length)
= 6(6×6)
= 216cm²
B. What is the area of the bottom rectangular prism?
Front & Back :
$$2(10 \times 8) = 160$$

Left & Right : $2(G \times 8) = 96$
Top + Bottom : $2(10 \times 6) = 120$
C. What is the area of the overlap region? 376
OVerlap = $2(6\times6)$
= 72
D. What is the total surface area of the entire object?
 $\overline{1.5A} = 216 + 376 - 72$
= $520cm^2$

3. Assume each face of the cube has area 1 cm^2 . Determine the surface area of each composite object.

