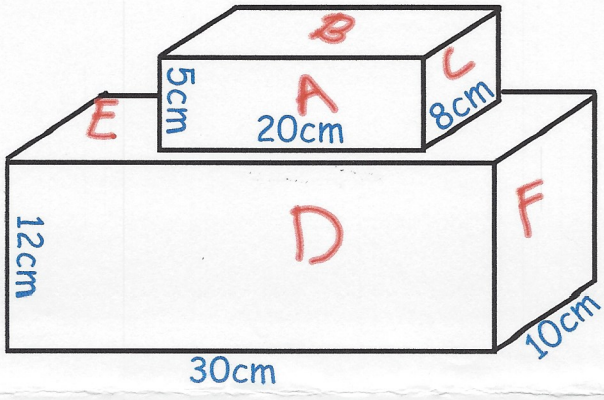
Surface area of composite rectangular prisms:

Find the surface area of the following object.

$A = l \times w$



$A_A = 20cm \times 5cm = 100cm^2 \times 2 = 200cm^2$

$A_B = 20cm \times 8cm = 160cm^2 \times 2 = 320cm^2$

$A_C = 8cm \times 5cm = 40cm^2 \times 2 = +\ 80cm^2$

$600cm^2$

$A_D = 30cm \times 12cm = 360cm^2 \times 2 = 720cm^2$

$A_E = 30cm \times 10cm = 300cm^2 \times 2 = 600cm^2$

$A_F = 12cm \times 10cm = 120cm^2 \times 2 = +\ 240cm^2$

$1560cm^2$

Overlaps:

Which side is overlapped? B

overlap = $B \times 2 = 160cm^2 \times 2 = 320cm^2$

Total surface area = $600cm^2 + 1560cm^2 - 320cm^2$

$= 1840cm^2$