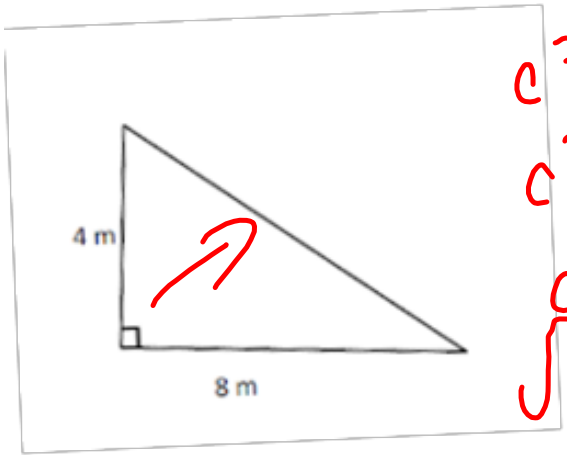
Find the hypoteneus November 12, 2015



$c^2 = a^2 + b^2$

$c^2 = 4^2 + 8^2$

$c^2 = 16 + 64$

$\sqrt{c^2} = \sqrt{80}$

$c = 8.9$

To Find Surface Area...

Step 1 Draw the faces

Step 2 Find the area of each face

Step 3 Add the area of each face

Surface Area of Composite Objects

A composite object is the result of combining one or more objects to make a new object

Number of Cubes	Surface Area (square units)
1	6 units^2
2	10 units^2
3	14 units^2
4	18 units^2
5	22 units

Surface Area of one cube

x6 | 1

A = bh
= 1x1
= 1
x 6 faces
6 units^2

***Each connection give a loss of two faces ***

Find the surface area.

Page 26 to find picture.

x6

A = bh
= 1 x 1
= 1 x 6 faces
6 units

# of cubes x surface area of 1 cube
4 x 6 = 24 units

Surface area - # faces lost
24 - 6 = 18 units^2

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#4

a) 

b) 

a) # of cubes x SA of one cube

$3 \times 6 = 18 \text{ units}^2$

SA - # faces lost

$18 - 4 = 14 \text{ units}^2$

b) # of cubes x SA one cube

$4 \times 6 = 24 \text{ units}^2$

SA - # faces lost

$24 - 6 = 18 \text{ units}^2$

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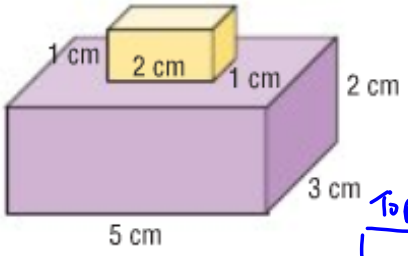
8. Determine the surface area of each composite object.
What effect does the overlap have on the calculation of the surface area?

a)



TSA big

TSA for small

Front/Back | Top/Bottom | Sides

1cm | x2 | 2 | x2 | 1 | x2

2cm

A = bh = 1x2 = 2 x2 = 4

A = bh = 2x1 = 2 x2 = 4

A = bh = 1x1 = 1 x2 = 2

4 + 4 + 2 = 10cm²

Top/Bottom | Front/Back | Sides

x2 | 3 | x2 | 2 | x2 | 2

5 | 5 | 3

A = bh = 5x3 = 15 x2 = 30

A = bh = 5x2 = 10 x2 = 20

A = bh = 3x2 = 6 x2 = 12

30 + 20 + 12

TSA big = 62

TSA small + Big

10 + 62 = 72cm²

- 4 [lose bottom small twice]

68cm²

Homework

Pg 30 # 4 c,d, e, f

cubes x 6

SA - faces lost

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144 cm^2