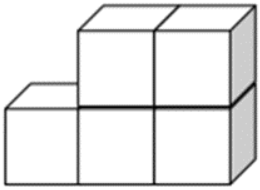
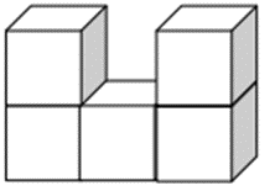
Warm-Up Nov. 15/19

Find the surface area of the following: Show your work.





① # of cubes x SA 1 cube
5 x 6
TSA: 30

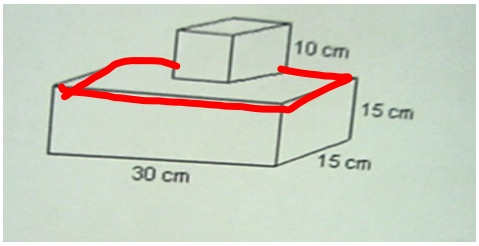
② TSA - # faces lost
30 - 10
$20\ u^2$

5 connections
lose 2 faces
each time

① # of cubes x SA 1 cube
5 x 6
$30u^2$

② TSA - faces lost
30 - 8
$22\ u^2$

Find the surface area of the following.



#1. SA of cube

x6 | 10

10

A = bh

= 10x10

= 100 ← area of one face

x 6

TSA 600 cm²

#2. SA of Rectangular Prism.

F/B | T/B | sides

x2 | x2 | x2

15 | 15 | 15

30 | 30 | 15

A = bh | A = bh | A = bh

= 30x15 | = 30x15 | = 15x15

= 450 | = 450 | = 225

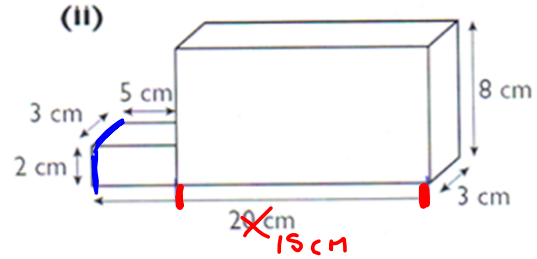
x2 | x 2 | x 2

900 cm² + 900cm² + 450 = TSA: 2250

TSA: Area #1 + Area #2 - faces lost

600 + 2250 - 200

TSA 2650cm²



small

front/back

x2

2

5

A = bh
= 5 x 2
= 10

x2
20

sides

x2

2

3

A = bh
= 3 x 2
= 6

one face

x2
12

top/bottom

x2

3

5

A = bh
= 5 x 3
= 15

x2
30

Total 20 + 12 + 30 = 62 cm²

Big

sides

x2

8

3

front/back
top/bottom

x2

3

15

A = bh
= 8x3
= 24

x2
48

A = bh
= 15x8
= 120

x2
240

Total 240 + 48 + 90 = 378 cm²

62 + 378 = 440 total

Total - Overlap/Connections

$440 - 12 = 428\ cm^2$