

1. The **inside** of a refrigerator in a medical laboratory measures 17 in by 18 in by 42 in. How much samples can you **fit in**?

Key words: *inside, fit in* Find: *Volume*

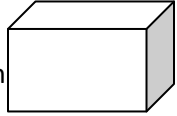
Formula: $V = lwh$

Substitute: $V = 17 \cdot 18 \cdot 42$

Simplify: $V = 12,852 \text{ in}^3$

2. A birthday gift is placed inside the box shown. What is the minimum amount of **wrapping paper** needed to **wrap** this gift?

Key words: *wrap* Find: *SA*



Formula: $SA = 2lw + 2lh + 2wh$

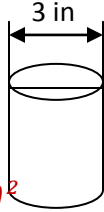
Substitute: $SA = 2(10)(7) + 2(10)(14) + 2(7)(14)$

Simplify: $SA = 140 + 280 + 196$

$SA = 616 \text{ in}^2$

3. How much metal was used to make this can of soup?

Key words: Find:



Formula: $SA = 2\pi rh + 2\pi r^2$

Substitute: $SA = 2(3.14)(1.5)(3) + 2(3.14)(1.5)^2$

Simplify: $SA = 2(3.14)(1.5)(3) + 2(3.14)(2.25)$

$SA = 28.26 + 14.13$

$SA = 42.39 \text{ in}^2$

there is no metal inside the can, only walls are made out of metal, so we look for a Surface Area

4. Refer to problem #3. How much soup does the can **contain**?

Key words: *contain* Find: *Volume*

Formula: $V = \pi r^2 h$, $r = 1.5 \text{ in}$

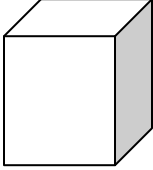
Substitute: $V = 3.14 \cdot 1.5^2 \cdot 3$

Simplify: $V = 3.14 \cdot 2.25 \cdot 3$

$V = 21.2 \text{ in}^3$

5. Lawrence is donating some outgrown clothes to charity. How many **cubic feet** of clothes will **fit in** the box?

Key words: Find:



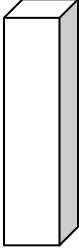
Formula:

Substitute:

Simplify:

6. All **sides** of the wafer are to be **covered** in frosting. Calculate how much should be **covered**.

Key words: Find:



Formula:

Substitute:

Simplify: