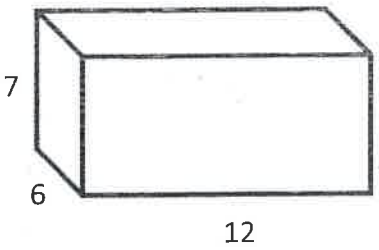
Name _____ Date _____

Find the volume.
Use 3.14 for π. Round all final answers to the nearest tenth as needed.

$V = l \cdot w \cdot h$

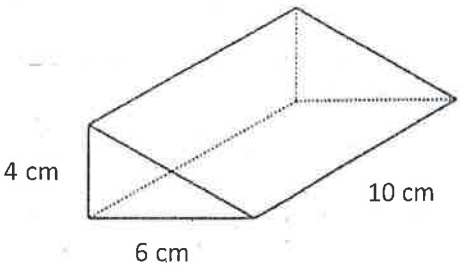
504 units^3



$V = (\frac{1}{2}bh)l$

$(\frac{1}{2} \cdot 6 \cdot 4)10$

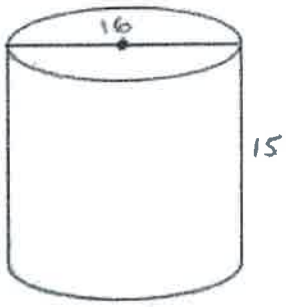
120 cm^3



$V = \pi r^2 h$

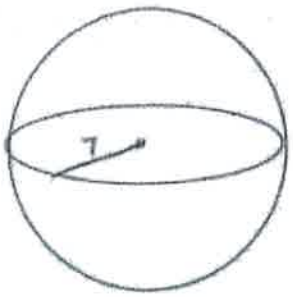
$(3.14)(8^2)(15)$

3014.4 units^3



$V = \frac{4}{3}\pi r^3$

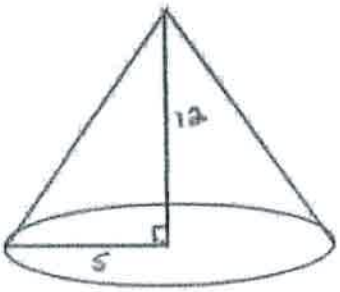
1436 units^3



$V = \frac{1}{3} A_{base} \cdot h$

$\frac{1}{2} \pi 5^2 \cdot 12$

314 units^3

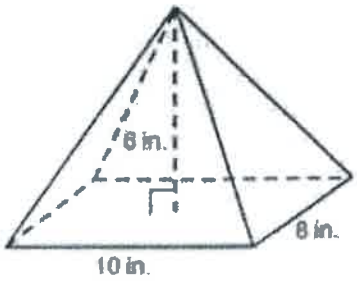


$V = \frac{lwh}{3}$

$\frac{10 \cdot 8 \cdot 6}{3}$

$\frac{480}{3} \text{ in}^3$

160 in^3



Cyl + cone

$\pi r^2 h$

$(3.14)(12^2)(16)$

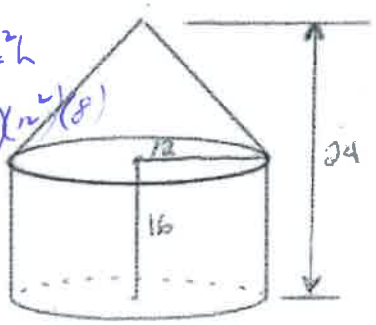
7234.56

$+ 1205.76$

8440.32 units^3

$\frac{1}{3} \pi 12^2 h$

$\frac{1}{3}(3.14)(12^2)(8)$



cube - cone

$l \cdot w \cdot h$

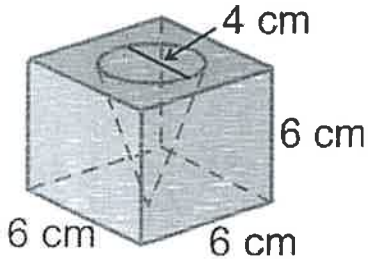
$6 \cdot 6 \cdot 6$

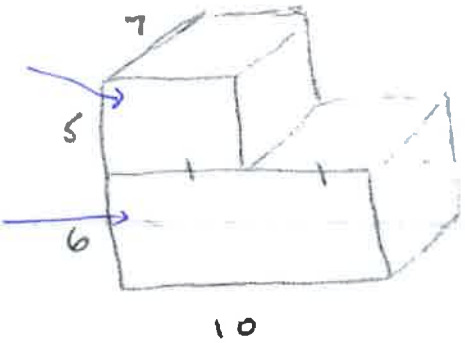
$216 - 25.12$

190.88 cm^3

$\frac{1}{3} A_{base} \cdot h$

$\frac{1}{3} \pi 2^2 \cdot 6$





5·5·7

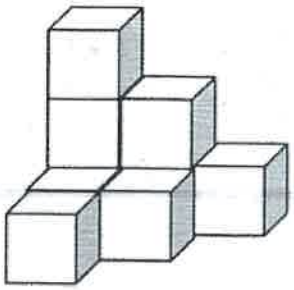
175

6·10·7

420

$V = 595$ units^3

Each block is 1 x 1 x 1cm



9 cubes

9 cm^3

A farmer just had a new grain silo installed.
It has a diameter of 18' and the cylindrical section is 35' tall.

How much grain should be ordered to fill the silo?

cyl + ½ sphere

$\pi r^2 h$ $\quad \frac{1}{2}\left(\frac{4}{3}\pi r^3\right)$

$(3.14)(9^2)(35)$ $\quad \frac{1}{2}\cdot\frac{4}{3}(3.14)(9^3)$

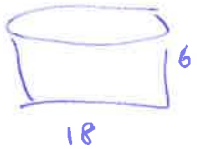
8901.9 + 1526.04 = 10427.94 FT^3

Two months later the farmer need to order more grain.
He has determined that there is still 6' of grain in the silo.
How much should he order to refill the silo?

grain

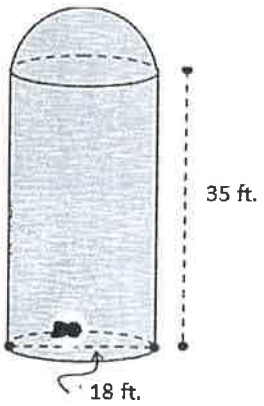
$\pi r^2 h$

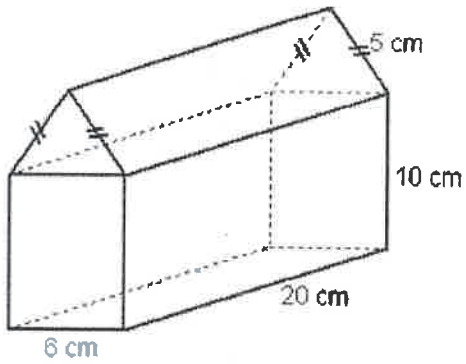
$(3.14)(9^2)(6) = 1526.04$



order

8901.9 FT^3



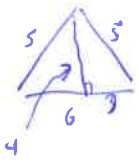


Rect Prism + Δ Prism

$l \cdot w \cdot h$ $\quad \frac{1}{2} bh \cdot l$

6·10·10

1200 cm^3



$\frac{1}{2}(6)(4)\cdot 20$

240 cm^3

$V = 1440$ cm^3