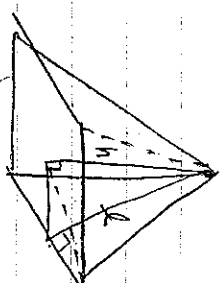


12.2

	①	②	③	④	⑤	⑥
h	4	12	24	3√7	3	6
base edge	5	13	25	12	5	24√7
lat. edge	√34	10	√194	14	18	5√2
				√1074	15	10



①  $4^2 + b^2 = 5^2$

$b = 3 \times 2 =$   
 $4^2 + (3 \times 2)^2 = e^2$   
 $16 + 18 = e^2$   
 $\sqrt{34} = e$

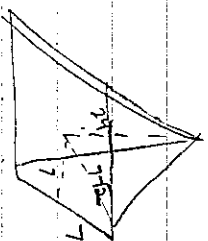


②  $12^2 + b^2 = 13^2$

$b = 5 \times 2 =$   
 $12^2 + (5 \times 2)^2 = e^2$   
 $\sqrt{194} = e$



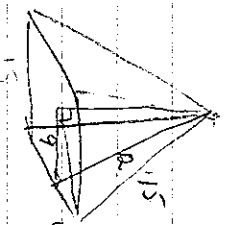
③



$24^2 + 7^2 = l^2$   
 $\sqrt{625} = l = 25$

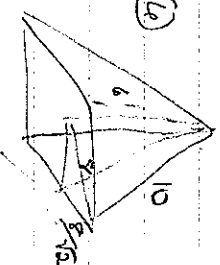
$24^2 + (7\sqrt{5})^2 = e^2$   
 $576 + 98 = e^2$   
 $\sqrt{674} = e$

④



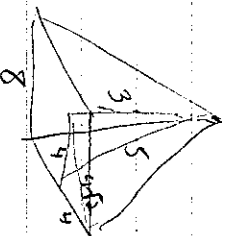
$12^2 + b^2 = 15^2$   
 $b = 9 \times 2 =$   
 $9^2 + h^2 = 12^2$   
 $h = \sqrt{63}$

⑥



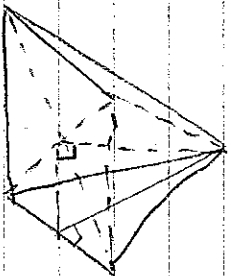
$6^2 + d^2 = 10^2$   
 $d = 8$   
 $(4\sqrt{3})^2 + l^2 = 10^2$   
 $l = \sqrt{68}$

⑤



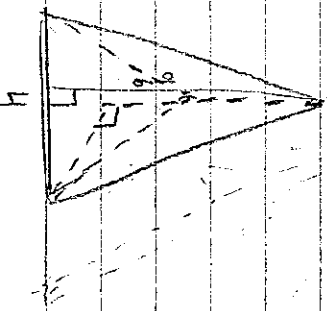
$4^2 + h^2 = 5^2$   
 $h = 3$   
 $3^2 + (4\sqrt{2})^2 = e^2$   
 $\sqrt{41} = e$

$\frac{1}{2}b = \frac{8}{\sqrt{2}}$   
 $b = 8\sqrt{2}$



$$LA = \frac{1}{3} \pi r^2 h$$

⑦



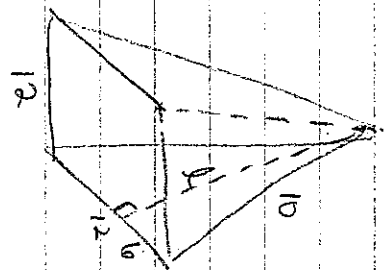
$$LA = \frac{1}{3} (12)(9) = 36$$

⑧

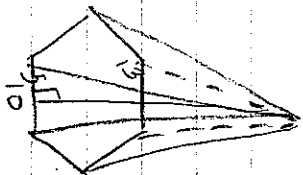


$$LA = \frac{1}{3} (7.5)(9) = 33.75$$

⑨



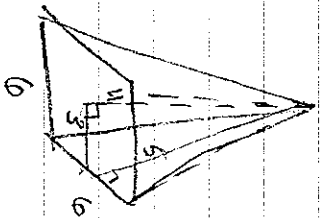
$$16^2 + 1^2 = 10^2 \quad LA = \frac{1}{3} (48)(8) = 128$$



$$5^2 + 12^2 = 13^2$$

$$L = 12$$

$$LA = \frac{1}{2} (60)(12) = 360$$



$$4^2 + 3^2 = 5^2$$

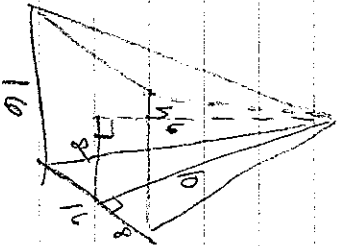
$$5 = L$$

$$LA = \frac{1}{2} (24)(5) = 60$$

$$TA = 60 + 36 = 96$$

$$V = \frac{1}{3} (36)(4) = 48$$

$$B = 36$$



$$8^2 + 6^2 = 10^2$$

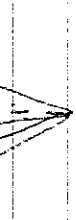
$$h = 6$$

$$B = 16^2 = 256$$

$$LA = \frac{1}{2} (64)(10) = 320$$

$$TA = 320 + 256 = 576$$

$$V = \frac{1}{3} (256)(6) = 512$$



$$12^2 + 5^2 = 13^2$$

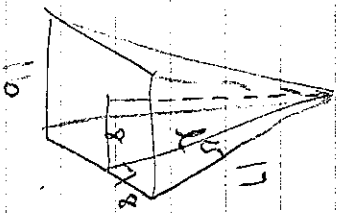
$$h = 5, a = 10$$

$$LA = \frac{1}{2} (40)(13) = 260$$

$$TA = 260 + 100 = 360$$

$$V = \frac{1}{3} (100)(12) = 400$$

$$B = 10^2 = 100$$



$$8^2 + 15^2 = 17^2$$

$$L = 15$$

$$LA = \frac{1}{2} (64)(15) = 480$$

$$TA = 480 + 256 = 736$$

$$V = \frac{1}{3} (256)(15) = \frac{256\sqrt{141}}{3}$$

$$B = 256$$

$$h^2 + 8^2 = 15^2$$

$$h = \sqrt{141}$$

$$\textcircled{15} \quad V = \frac{1}{3} B h$$

$$32 = \frac{1}{3} (16)(h)$$

$$96 = 16h$$

$$6 = h$$

$$\textcircled{16} \quad LA = \frac{1}{2} l p$$

$$60 = \frac{1}{2} l (24)$$

$$120 = 24l$$

$$5 = l$$

$$\textcircled{17} \text{ a) } 12^2 + 9^2 = VX^2$$

$$12^2 + 5^2 = VY^2$$

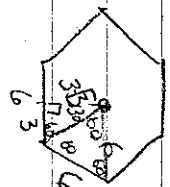
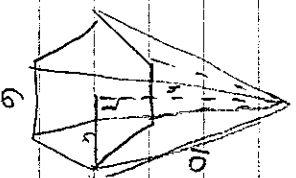
$$15 = VX$$

$$13 = VY$$

$$\text{b) } LA = 2 \left( \frac{1}{2} (10)(15) \right) + 2 \left( \frac{1}{2} (18)(13) \right)$$

$$LA = 150 + 234 = \boxed{384}$$

$\textcircled{18}$



$$V = \frac{1}{3} (54\sqrt{3})(8)$$

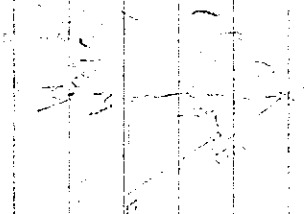
$$V = 144\sqrt{3}$$

$$6^2 + h^2 = 10^2$$

$$B = \frac{1}{2} (36)(3\sqrt{3})$$

$$B = 54\sqrt{3}$$

$\textcircled{19}$



$$V = 10 \times 6 \times 10$$

$$V = 600$$