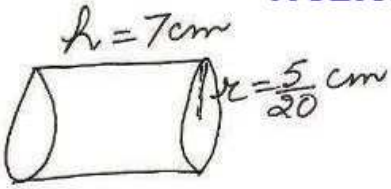
NCERT Exemplar Solutions by (Dev Anoop)

(4)



volume of ink in fountain pen $= \pi r^2 h$

$= \frac{22}{7} \times \frac{5}{20} \times \frac{5}{20} \times 7$

$= \frac{275}{2 \times 100}$

$= 1.375 \text{ cm}^3$

$= \frac{1.375}{1000} \ell$

words ink $\frac{1.375}{1000} \ell$ can write $= 3300$

words ink $\frac{1}{5} \ell$ can write

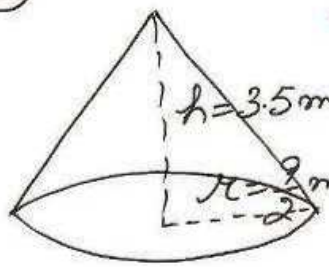
$= \frac{3300}{\frac{1.375}{1000}} \times \frac{1}{5}$

$= \frac{3300 \times 1000}{1.375} \times \frac{1}{5}$

$= \frac{66 \times 1000000}{1375}$

$= 480000$

(6)



$l = \sqrt{3.5^2 + 4.5^2}$

$= \sqrt{12.25 + 20.25}$

$= \sqrt{32.5} \text{ m}$

$= 5.7 \text{ m}$

volume of rice in heap $= \frac{1}{3} \pi r^2 h$

$= \frac{1}{3} \times \frac{22}{7} \times \frac{9}{2} \times \frac{9}{2} \times 3.5$

$= \frac{297}{4}$

$= 74.25 \text{ m}^3$

area of cloth required to cover the heap

$= \pi r l$

$= \frac{22}{7} \times \frac{9}{2} \times 5.7$

$= \frac{564.3}{7}$

$= 80.61 \text{ m}^2$

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