

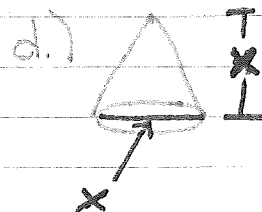
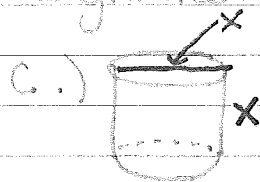
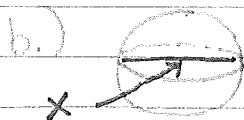
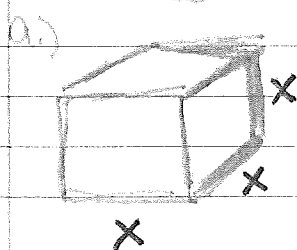
Examples

1.) Fish tank dimensions are 14 in \times 16 in \times 10 in.
No Rocks @ bottom.
Water is 1680 cubic inches. What % of the tank is empty?

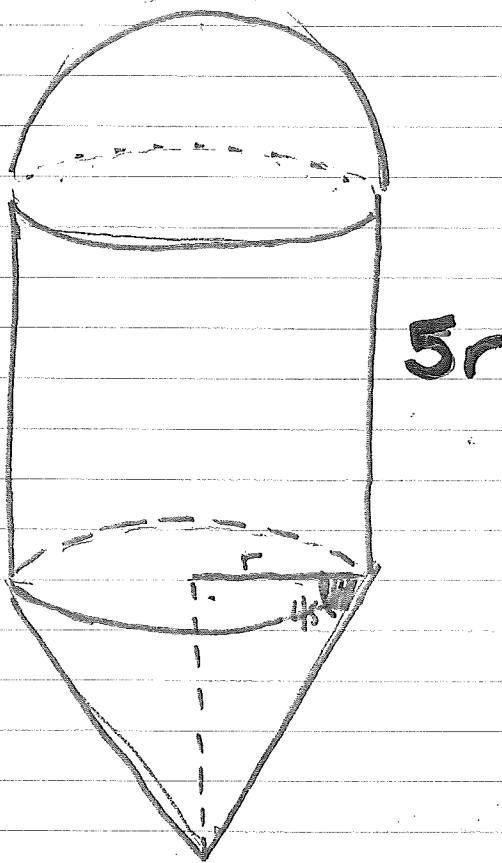
2.) A hemispherical water tank has a diameter of 10 ft. If water has a density of 62.4 Pounds per cubic foot what is the weight of the full tank?
water in the

3.) The perimeter of a square base of a pyramid is 36 inches, the height of the pyramid is 15 inches. To fill the pyramid w/ sand naturally, the wind blows sand at approx. 5 cubic inches a day. You set up your pyramid upside down and collect sand. When will the pyramid be filled w/ sand?

4.) Which diagram represents the greatest volume?



5.) Find the
Volume.



Examples *Key*

- 1.) Fish tank dimensions are 14 in \times 16 in \times 10 in. No Rocks @ bottom. Water is 1680 cubic inches. What % of the tank is empty?

25%

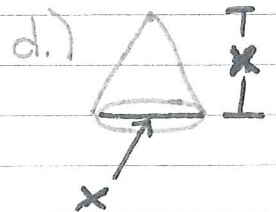
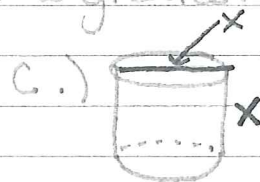
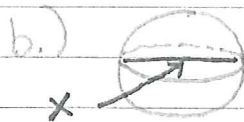
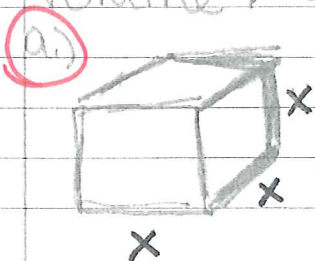
- 2.) A hemispherical water tank has a diameter of 10 ft. If water has a density of 62.4 Pounds per cubic foot what is the weight of the full tank?

$\approx 16,336.2576$ Pounds

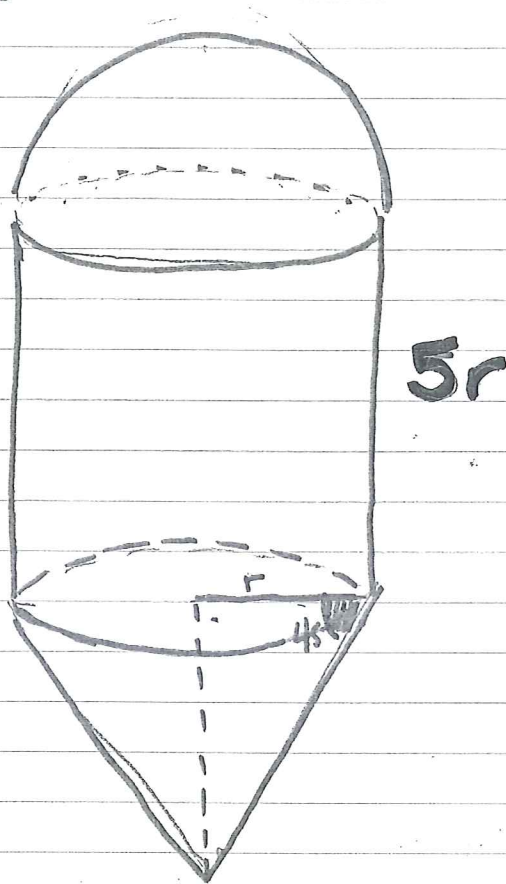
- 3.) The perimeter of a square base of a pyramid is 36 inches, the height of the pyramid is 15 inches. To fill the pyramid w/ sand naturally, the wind blows sand at approx. 5 cubic inches a day. You set up your pyramid upside down and collect sand. When will the pyramid be filled w/ sand?

81 days

- 4.) Which diagram represents the greatest volume?



5.) Find the
Volume.



$$V = \pi r^2 h + \frac{1}{3} \pi r^2 H$$