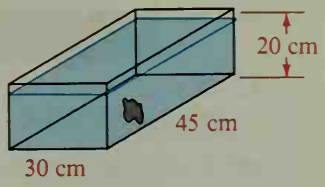
23. The container shown has the shape of a rectangular solid. When a rock is submerged, the water level rises 0.5 cm. Find the volume of the rock.

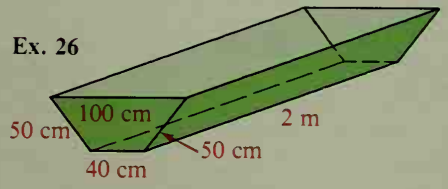


24. A driveway 30 m long and 5 m wide is to be paved with blacktop 3 cm thick. How much will the blacktop cost if it is sold at the price of $175 per cubic meter?

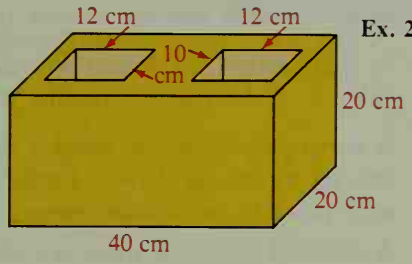
25. A brick with dimensions 20 cm, 10 cm, and 5 cm weighs 1.2 kg. A second brick of the same material has dimensions 25 cm, 15 cm, and 4 cm. What is its weight?

26. A drinking trough for horses is a right trapezoidal prism with dimensions shown below. If it is filled with water, about how much will the water weigh? (*Hint*: 1 m^3 of water weighs 1 metric ton.)

Ex. 26

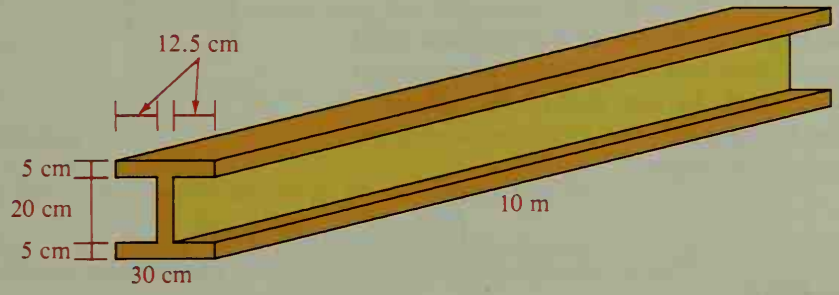


Ex. 27



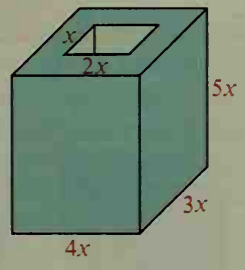
27. Find the weight, to the nearest kilogram, of the cement block shown. Cement weighs 1700 kg/m^3.

28. Find the weight, to the nearest 10 kg, of the steel **I**-beam shown below. Steel weighs 7860 kg/m^3.



Find the volume and the total surface area of each solid in terms of the given variables.

29.



30.