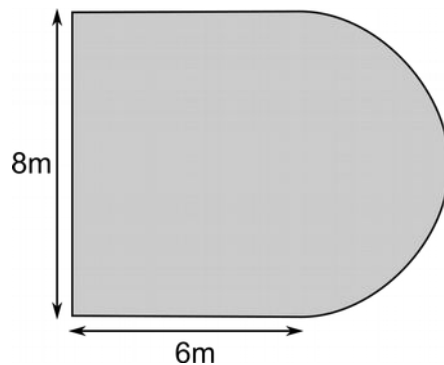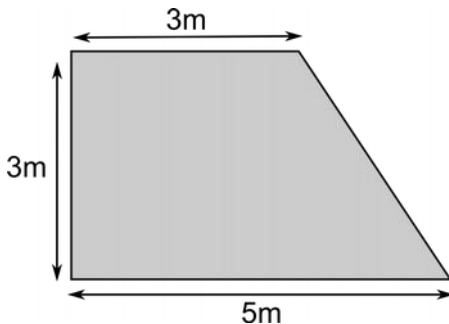# Numbers, Areas, Volumes – Practice

1. Write in standard form:
   (a) 32 167   (b) 1 010 000   (c) 0.538   (d) 0.000 003 4

2. Write the following without using powers of ten:
   (a) 1.084×10^6 (b) 4.2863×10^2 (c) 7.2×10^{-3} (d) 5.44×10^{-1}

3. Write these distances (in metres) in standard form:
   (a) Average radius of the Earth = 6 371 000m
   (b) Average Earth-Sun distance = 149 000 000 000m
   (c) One inch = 0.0254m
   (d) Radius of a hydrogen atom = 0.000 000 000 052 91m

4. Write these numbers in standard form to 3 significant figures
   (Remember: 5 and above rounds up):
   (a) 1452.3   (b) 9 841 667 (c) 41.882   (d) 1.999   (e) 0.8992

   1: 3.2167×10^4, 1.01×10^6, 5.38×10^{-1}, 3.4×10^{-6}
   2: 1,084,000, 428.63, 0.0072, 0.544
   3: 6.371×10^6m, 1.49×10^{11}m, 2.54×10^{-2}m, 5.291×10^{-11}m
   4: 1.45×10^3, 9.84×10^6, 4.19×10^1, 2.00, 8.99×10^{-1}

5. Calculate the areas of these floor plans:

($12m^2$, $73m^2$)

6. A cylindrical baked bean can has diameter 7.0cm, height 10.5cm.
   Calculate:
   (a) the volume of the can in cm^3, *($404cm^3$)*
   (b) the minimum area of sheet metal needed to manufacture the can (top, bottom and side). *($308cm^2$)*