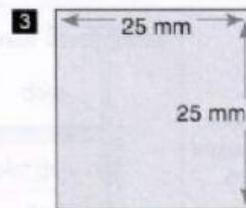
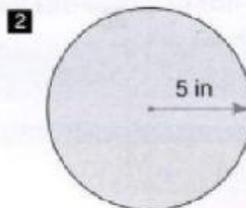
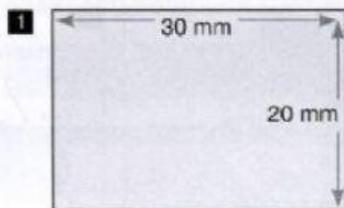


Calculations

Vocabulary 1 Look at these cross-sections. Calculate the areas.

- area of a circle = πr^2
- volume of a cylinder = $\pi r^2 h$
- volume of a sphere = $\frac{4}{3}\pi r^3$
- volume of a cone = $\frac{1}{3}\pi r^2 h$



Language

Calculations

Note how we say calculations:

$20 \times 30 = 600 =$ *twenty times thirty is equals 600*

$\pi r^2 =$ *pi r squared*

$2\pi r =$ *two pi r*

$600 \text{ m}^2 =$ *six hundred square metres*

$600 \text{ m}^3 =$ *six hundred cubic metres*

$\sqrt{64} = 8 =$ *the square root of sixty-four is eight*

= equals

+ plus

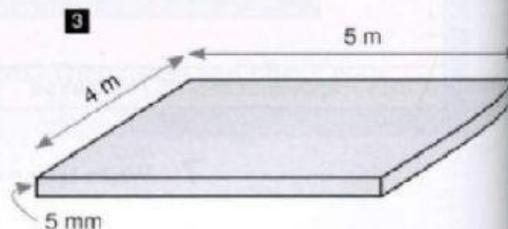
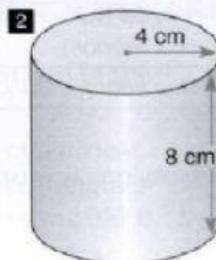
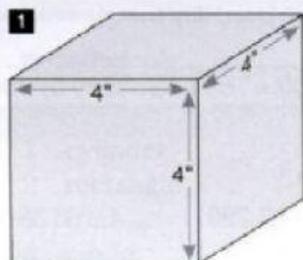
- minus

/ divided by

\times multiplied by/times

$\sqrt{\quad}$ the square root of

2 Calculate these volumes. Compare your answers with a partner.



3 The answers to these calculations are incorrect. Correct the answers and then compare with a partner.

1 $3 \times 4 = 15$

2 $16 / 8 = 3$

3 $\sqrt{25} = 4$

4 $18 - 15 = 2$

5 $76 + 32 = 107$

Speaking 4 Work in pairs. Take turns to give each other simple calculations to do.

A: *What's the square root of 121?*

B: *11. My turn. What's 174 divided by 3?*

A: *48.*

B: *No, it's 58.*