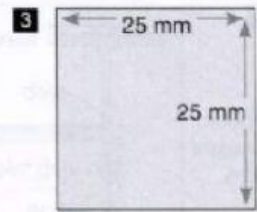
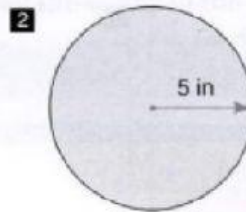
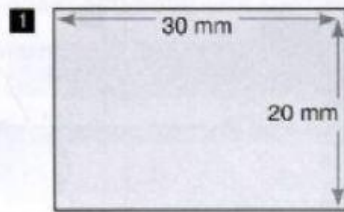


Calculations

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 m^2 = six hundred square metres

600 m^3 = six hundred cubic metres

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

= equals

+ plus

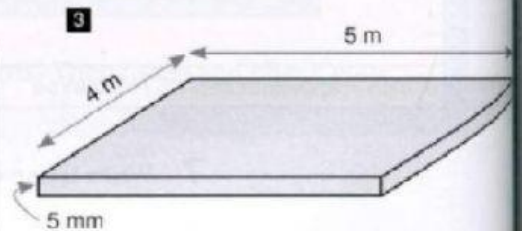
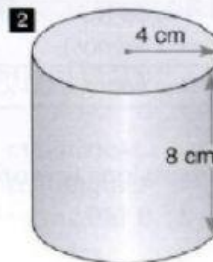
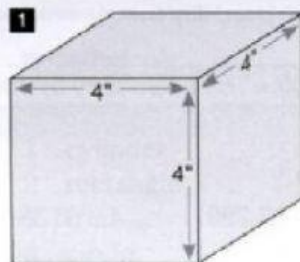
- minus

/ 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 $16 \div 8 = 3$

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.