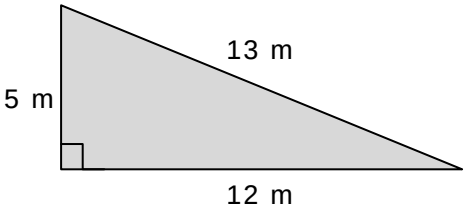
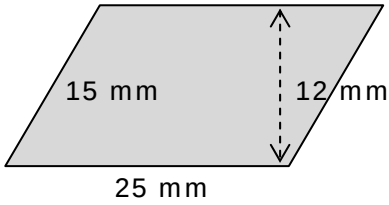
Basic Measurement Practice #3

1.



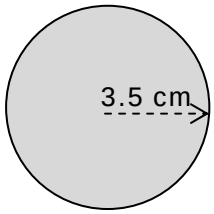
Area = ... Perimeter = ...

2.



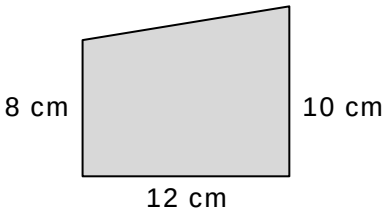
Area = ... Perimeter = ...

3.



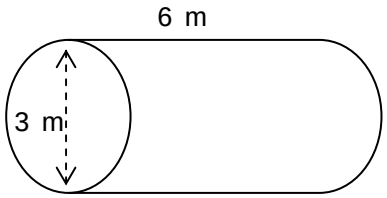
Area = ... Perimeter = ...

4.



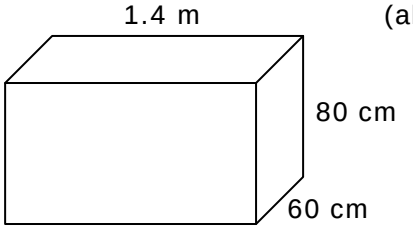
Area = ... Perimeter = ...

5.



Volume = ... Surface Area = ...

6. (all angles are 90°)



Volume = ... Surface Area = ...

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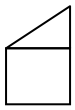
Answers: Basic Measurement Practice #3

	Area	Perimeter
1.	½ × base × height ½ × 12 × 5 = **30 m²**	all sides added together 5 + 12 + 13 = **30 m**
2.	base × height (at 90°) 25 × 12 = **300 mm²**	all sides added together 25 + 15 + 25 + 15 = **80 mm**
3.	π × radius² π × 3.5² = **38.48 cm²**	π × diameter π × 7 = **21.99 cm**
4.	rectangle + triangle  12 × 8 + ½ × 12 × 2 = **108 cm²**	need to use Pythagoras for diagonal length 12 + 10 + 8 + $\sqrt{12^2 + 2^2}$ = **42.2 cm**

	Volume	Surface Area
5.	base area (π × radius²) × depth π × 1.5² × 6 = **42.41 m³**	two bases + one side (perimeter × depth) 2 × (π × 1.5²) + (π × 3) × 6 = **70.69 m²**
6.	base × height × depth (in same units) 0.6 × 0.8 × 1.4 = **0.672 m³** *or if you prefer in cm not m* 60 × 80 × 140 = **672,000 cm³**	6 sides, all base × height (same units) (0.6 × 0.8) + (0.6 × 1.4) + (0.8 × 1.4) + (0.6 × 0.8) + (0.6 × 1.4) + (0.8 × 1.4) = **4.88 m²** (60 × 80) + (60 × 140) + (80 × 140) + (60 × 80) + (60 × 140) + (80 × 140) = **48,800 cm²**

Remember to check units as well as the number answer

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