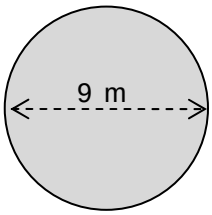
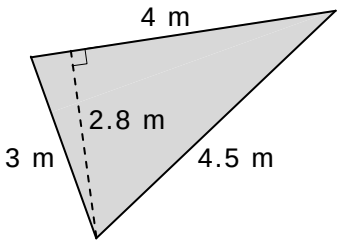
Basic Measurement Practice #4

1.



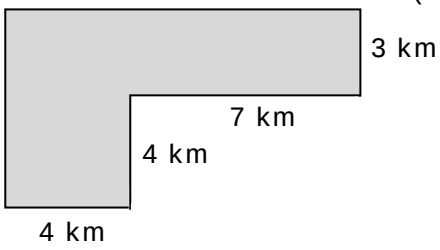
Area = ... Perimeter = ...

2.



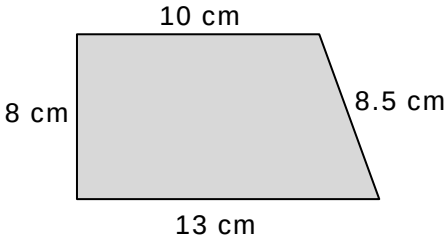
Area = ... Perimeter = ...

3. (all angles are 90°)



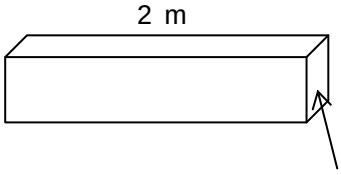
Area = ... Perimeter = ...

4.



Area = ... Perimeter = ...

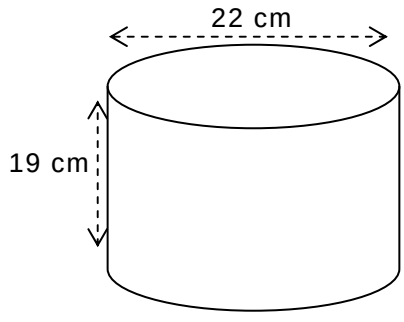
5.



ends are square,
20 cm by 20 cm

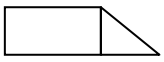
Volume = ... Surface Area = ...

6.



Volume = ... Surface Area = ...

Answers: Basic Measurement Practice #4

	Area	Perimeter
1.	$\pi \times \text{radius}^2$	$\pi \times \text{diameter}$
	$\pi \times 4.5^2$ = **63.62 m²**	$\pi \times 9$ = **28.27 m**
2.	½ × base × height	all sides added together
	½ × 4 × 2.8 = **5.6 m²**	4 + 4.5 + 3 = **11.5 m**
3.	subtract small rectangle from large	all sides added together
	7 × 11 – 4 × 7 = **49 km²** 	3 + 7 + 4 + 4 + 7 + 11
	or divide into separate rectangles	= **36 km**
	4 × 4 + 4 × 3 + 7 × 3 = **49 km²**	
4.	rectangle + triangle 	all sides added together
	8 × 10 + ½ × 3 × 8 = **92 cm²**	10 + 8.5 + 13 + 8 = **39.5 cm**

	Volume	Surface Area
5.	base × height × depth	4 equal rectangle sides + 2 square ends
	2 × 0.2 × 0.2 = **0.08 m³**	4 × (2 × 0.2) + 2 × (0.2 × 0.2) = **1.68 m²**
	or	or
	200 × 20 × 20 = **80,000 cm³**	4 × (200 × 20) + 2 × (20 × 20)
		= **16,800 cm²**
6.	base area × depth	flat side + 2 round ends
	$(\pi \times \text{radius}^2) \times d$	$(\pi \times d \times h) + (\pi \times r^2) + (\pi \times r^2)$
	$\pi \times 11^2 \times 19$ = **7222.5 cm³**	$(\pi \times 22 \times 19) + (\pi \times 11^2) + (\pi \times 11^2)$
		= 2073.5 cm²

Remember to check units as well as the number answer