
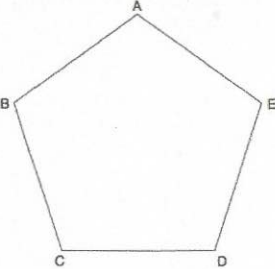
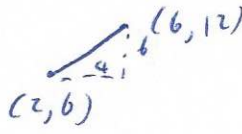


20th March		 Corbettmaths
 <p>Shown is a regular pentagon.</p>	<p>Find angle ABC.</p> $540^\circ \div 5 = 108^\circ$	
<p>A empty circular swimming pool has radius 10m and height 2m. The pool is going to be filled at a rate of 20 litres a minute. How long will it take to fill the pool?</p> $V = \pi r^2 h$ $= \pi \times 10^2 \times 2 = 628.3185 \text{ m}^3$	$628.3185 \times 1000 = 628318.5307 \text{ litres}$ $\div 20 = 31415.9 \text{ minutes}$ $\div 60 = 523.59 \text{ hours}$ $\div 24 = 21.8166 \text{ days}$	
<p>Work out the gradient of the straight line that passes through (2, 6) and (6, 12).</p> $\text{gradient} = \frac{\text{rise}}{\text{run}} = \frac{6}{4}$ $= 1.5$		
<p>Natalie invests £800 for 2 years at 10% per year compound interest. How much interest does she earn?</p> $800 \times 1.1^2 = 968$	$968 - 800 = 168$ $£168$	
<p>A container exerts a force of 2000 Newtons on the floor. The pressure on the table is 50 Newtons/m².</p> <p>Calculate the area of the container that is in contact with the table.</p> $P = \frac{F}{A}$	$A = \frac{F}{P} = \frac{2000}{50} = 40 \text{ m}^2$	