
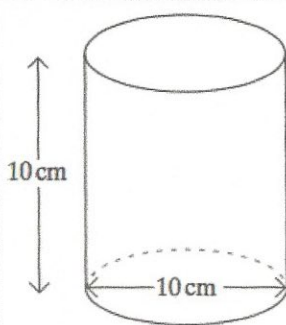
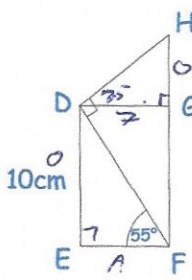


8th May		 Corbettmaths
 <p> <math>r = 5</math>  <math>h = 10</math>  <math>V = \pi r^2 h</math>  <math>V = \pi \times 5^2 \times 10</math>  <math>= \pi \times 25 \times 10</math> </p>	<p>Work out the volume in terms of pi.</p> <p style="text-align: center;"><math>250\pi \text{ cm}^3</math></p>	
<p>Write 0.434343... as a fraction</p> <p> <math>x = 0.4343\dots</math>  <math>100x = 43.4343\dots</math>  <math>99x = 43</math> </p>	<p><math>x = \frac{43}{99}</math></p>	
<p>A shopkeeper normally sells his goods at 80% above cost price.</p> <p>In a sale he reduces his prices by 40%.</p> <p>What percentage profit does he make on goods sold in the sale?</p>	<p>let <math>x = \text{cost price}</math></p> <p> <math>x \times 1.8 \times 0.6</math>  <math>= 1.08x</math>  <math>8\%</math> </p>	
<p>A rectangular playground is 10m longer than it is wide.</p> <p>The area of the playground is 1400m<sup>2</sup></p> <p>Calculate the width and length of the playground.</p> <p style="text-align: center;"><math>x + 10</math></p> <p style="text-align: center;"><math>x</math></p>	<p> <math>x(x + 10) = 1400</math>  <math>x^2 + 10x - 1400 = 0</math>  <math>a = 1</math>  <math>b = 10</math>  <math>c = -1400</math> </p> <p>using Quadratic formula</p> <p><math>x = 32.75\text{m}</math></p> <p>width = 32.75 length = 42.75</p>	
 <p> <math>FG = 10\text{cm}</math>  <math>\angle DFE = 55^\circ</math>  <math>EF = \frac{10}{\sin(55^\circ)}</math>  <math>= 7.00207\dots</math> </p>	<p> <math>DE = 10\text{cm}</math>  <math>\text{Angle } DFE = 55^\circ</math>                  Find the length of FH  <math>\angle FOG = 55^\circ</math>  <math>\angle GOH = 35^\circ</math>  <math>HG = \tan(35^\circ) \times 7.00207\dots</math>  <math>HG = 4.903</math> </p>	

$FH = 4.903 + 10 = 14.903\text{cm}$