
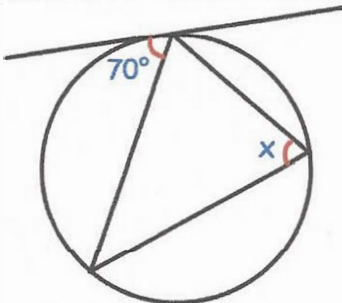
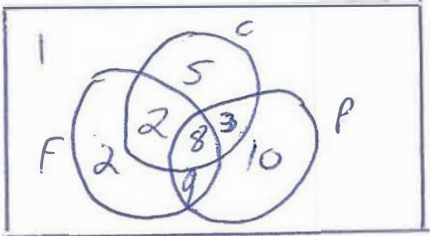


10th February		 Corbettmaths
<p>A large bottle of water is 14cm tall. A small bottle is 7cm tall. The bottles are mathematically similar. David claims the small bottle contains half the amount of water than the large bottle.</p>	<p>Show he is wrong.</p> <p>Sides $\times 2$ Volume $\times 2^3$ ($\times 8$) It contains $\frac{1}{8}$ of the amount.</p>	
<p>Solve, giving your answers to one decimal place.</p> $2x^2 = 9x + 40$ $2x^2 - 9x - 40 = 0$	$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$ $x = \frac{9 \pm \sqrt{81 - (-320)}}{4}$ $x = 7.3 \text{ or } x = -2.8$	
	<p>Find x</p> <p>70°</p>	
<p>Jenna asked 40 people which fizzy drink they liked from Coca-Cola, Pepsi and Fanta.</p> <p>39 people liked at least one of the drinks 8 people liked all three drinks 3 people liked Pepsi and Coca-Cola but not Fanta. 29 people liked Fanta or Coca-Cola. 34 people liked Pepsi or Fanta. 18 people liked Coca-Cola. 2 people liked only Fanta.</p> <p>Jenna picks one person at random from the 40 people.</p>	<p>Work out the probability that this person likes Pepsi.</p>  <p>Given that the person selected likes Pepsi, find the probability that this person likes both Fanta and Coca-Cola.</p> $\frac{8}{30} = \frac{4}{15}$	