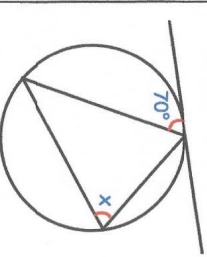
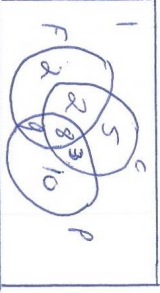
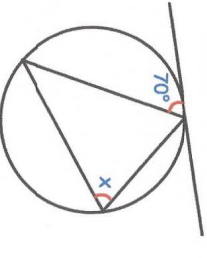
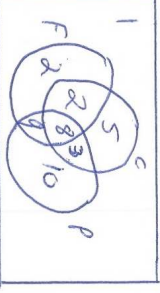


10th February	Corbettmaths
<p>A large bottle of water is 14cm tall. A small bottle is 7cm tall. The bottles are mathematically similar. David claims the small bottle contains half the amount of water than the large bottle.</p>	<p>Show he is wrong. Sides <math>\times 2</math> Volume <math>\times 2^3</math> (<math>\times 8</math>) It contains <math>\frac{1}{8}</math> of the amount.</p>
<p>Solve, giving your answers to one decimal place. <math>2x^2 = 9x + 40</math> <math>2x^2 - 9x - 40 = 0</math></p>	$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$ $x = \frac{9 \pm \sqrt{81 - (-320)}}{4}$ $x = 7.3 \text{ or } x = -2.8$
	<p>Find x <math>70^\circ</math></p>
<p>Jenna asked 40 people which fizzy drink they liked from Coca-Cola, Pepsi and Fanta. 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 and Coca-Cola. 34 people liked Pepsi and Fanta. 18 people liked Coca-Cola. 2 people liked only Fanta. 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> $\frac{8}{30} = \frac{4}{15}$

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