
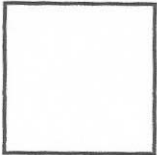


7th May	
<p>Write down <b>all</b> the integer values of <math>x</math> that satisfies <math>-7 \leq 2x + 1 &lt; 8</math></p> $-8 \leq 2x < 7$ $-4 \leq x < 3.5$	 Corbettmaths $-4, -3, -2, -1, 0, 1, 2, 3$
<p>Vanessa buys 30 bags of marshmallows at a total cost of £45. Each bag says that it contains 20 to 30 marshmallows.</p> <p>She says each marshmallow costs 7.5p</p>	<p>Explain how Vanessa has reached this conclusion.</p> <p>Vanessa has assumed all bags have 20 marshmallows</p> $30 \times 20 = 600 \text{ marshmallows}$ $4500 \div 600 = 7.5p \text{ per marshmallows}$
<p>Work out the lowest possible cost of each marshmallow</p> <p>30 per bag</p> $30 \times 30 = 900$	$4500 \div 900 = 5p \text{ each}$
<p>A empty circular swimming pool has radius 8m 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> $V = \pi \times r^2 \times h$ $= \pi \times 8^2 \times 2 = 402.1238... m^3$	$20L \div 1000 = 0.02 m^3$ $402.123... \div 0.02 = 20106.2 \text{ minutes}$ $= 335.103... \text{ hours}$ $13.96 \text{ days}$
<p><math>49 - 1 = 48</math></p> <p><math>7x - 1 \text{ cm}</math></p>  <p><math>5x + 13 \text{ cm}</math></p> $48 \times 4 = 192 \text{ cm}$	<p>Shown is a square. Calculate the perimeter of the square.</p> $7x - 1 = 5x + 13$ $2x - 1 = 13$ $2x = 14$ $x = 7$