

Number Revision

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(a)	(b)	(c)	(d)
<p>Evaluate:</p> <p>(a) $36^{3/2}$</p> <p>(b) $64^{-2/3}$</p> <p>(c) $32^{4/5}$</p>	<p>$A = 2^3 \times 5^4 \times 7^2 \times 13$ $B = 2^5 \times 5 \times 7^5 \times 11$</p> <p>(a) Find the highest common factor (HCF) of A and B</p> <p>(b) Find the lowest common factor of $2A$ and $5B$</p>	<p>Calculate</p> $\frac{(5.2 \times 10^{61}) \times (8.7 \times 10^{75})}{2.6 \times 10^5}$ <p>giving your answer in standard form</p>	<p>Use an algebraic method to show that $0.6\dot{2}\dot{1} = \frac{41}{66}$</p>
(e)	(f)	(g)	(h)
<p>Rationalise the denominator of</p> $\frac{5+\sqrt{12}}{2-\sqrt{3}}$ <p>giving your answer in the form $a + b\sqrt{3}$</p>	<p>$a = 5$ correct to the nearest integer, $b = 20$ correct to 1 significant figure and $c = 7.5$ correct to 1 decimal place.</p> <p>Find the upper and lower bounds of $\frac{b-c}{a}$</p>	<p>Write</p> $\frac{8^3 \times \sqrt{4^{10}}}{16^{3/2}}$ <p>as a single power of 2</p>	<p>Una invested \$4000 at a compound interest rate of $x\%$. After 7 years, her investment is worth \$4787.31. Find the value of x.</p>