

10.	Answer	(a) $52 \times 316 = 16\,432$ $5.2 \times 316 = \mathbf{1643}$	1
		(b) $52 \times 316 = 16\,432$ $16\,432 \div 52 = \mathbf{316}$	1
		(c) $52 \times 316 = 16\,432$ $5200 \times 0.316 = 16\,432 \times \frac{100}{1000} = \frac{16\,432}{10} = \mathbf{1643.2}$	1
		(d) $52 \times 316 = 16\,432$ $16\,432 \div 3160 = 52 \div 10 = \mathbf{5.2}$	1
		(e) $52 \times 316 = 16\,432$ $52 \div 2 = 26$ and $316 \div 2 = 158$ $26 \times 158 = 16\,432 \div (2 \times 2) = 16\,432 \div 4 = \mathbf{4108}$	1
		Total:	

Method	<p>You have to work out each part by comparing it to $52 \times 316 = 16\,432$.</p> <p>(a) $5.2 = 52 \div 10$ Therefore, you need to divide the other side of the equation by 10 too. $16\,432 \div 10 = 1643.2$.</p> <p>(b) $16\,432 \div 52$ is the inverse (opposite) of $52 \times 316 = 16\,432$ So, the answer is 316.</p> <p>(c) $5200 = 52 \times 100$, and 0.316 is $316 \div 1000$. So, $16\,432 \times \frac{100}{1000} = 16\,432 \times \frac{1}{10}$ This has the effect of dividing $16\,432$ by 10 to give 1643.2.</p> <p>(d) $16\,432 \div 316$ would be the inverse of $52 \times 316 = 16\,432$, giving an answer of 52. However, you are actually dividing 3160 (not 316). $3160 = 316 \times 10$ So, you must divide 52 by 10 to give 5.2.</p> <p>(e) Comparing 26×158 with the original calculation, 26 is half of 52 and 158 is half of 316 – both been divided by 2. Therefore, $16\,432$ must be divided by 2×2, i.e. 4.</p>
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