| 1st August Higher 5-a-day |  |
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| Ciara has a box of 1200 counters. <br> She takes out 40 counters and 7 of them were red. Ciara then returns the counters to the box. <br> Use this information to estimate how many of the counters in the box are red. | Corbettmoths |
| Simplify fully $\frac{x^{2}+8 x}{x^{2}-64}$ |  |
|  | Is it possible to fit a thin, straight rod that is 11.5 cm entirely inside the box? |
| $A B C D E F$ is a regular hexagon. | Find in terms of $\mathbf{a}$ and $\mathbf{b}$ the vector $B A$ |
| Find in terms of $\mathbf{a}$ and $\mathbf{b}$ the vector <br> FC | Find in terms of $\mathbf{a}$ and $\mathbf{b}$ the vector ED |

