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| **Crack the Code** | **Forming and Solving Equations** |

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| **A** | The area is $138 cm^{2}$ | **B** | The perimeter is $43 cm$. All lengths are in $cm$. |
| **C** |  | **D** |  |
| **E** |  The area is $343.5 cm^{2}$. All lengths are in $cm$. | **F** | A cuboid has dimensions of $5$ cm, $3.6$ cm and $(5+3x)$ cm. The volume of the cuboid is $846 cm^{3}$. |
| **G** | The area is $236 cm^{2}$. All lengths are in $cm$. | **H** | The shape is a rhombus. |
| **I** | The total surface area is $343.6 cm^{2}$.  | **J** | The two shapes have equal areas. |
| **K** | Here are four numbers:$x, x+2, x+7$ and $170$.The mean of the four numbers is twice the mean of the first three numbers. | **L** | The area of the trapezium is twice the area of the triangle. All lengths are in $cm$. |
| In each question, form and solve an equation in $x$. To get the three-digit code, add all your solutions together. |