



# Crack the Code



## Binomial Expansion

<b>A</b>	Find the coefficients of all terms in the expansion of $(x + 1)^3$  <b>1, 3, 3, 1</b>	<b>B</b>	Find the coefficients of all terms in the expansion of $(x + 2)^4$  <b>1, 8, 24, 32, 16</b>
<b>C</b>	Find the coefficients of all terms in the expansion of $(x - 1)^5$  <b>1, -5, 10, -10, 5, -1</b>	<b>D</b>	Find the coefficients of all terms in the expansion of $(2x + 1)^3$  <b>8, 12, 6, 1</b>
<b>E</b>	Find the coefficients of all terms in the expansion of $(3 + x)^3$  <b>27, 27, 9, 1</b>	<b>F</b>	Find the coefficients of all terms in the expansion of $(4 - x)^4$  <b>256, -256, 96, -16, 1</b>
<b>G</b>	Find the coefficient of the $x^5$ term in the expansion of $(x + 5)^6$  <b>30</b>	<b>H</b>	Find the coefficient of the $x$ term in the expansion of $(2 + x)^7$  <b>448</b>
<b>I</b>	Find the coefficient of the $x^3$ term in the expansion of $(x - 7)^4$  <b>-28</b>	<b>J</b>	Find the coefficient of the $x^3$ term in the expansion of $(1 - 2x)^5$  <b>-80</b>
<b>K</b>	The coefficient of the $x$ term in the expansion of $(x + a)^4$ is 500. Find $a$ .  <b>5</b>	<b>L</b>	The coefficient of the $x^2$ term in the expansion of $(2x - b)^5$ is -13720. Find $b$ .  <b>7</b>

To get the three-digit code, add together all your answers. **643**