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| **Crack the Code** | **Sums of Series** |

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| **A** | Evaluate$$\sum\_{r=1}^{5}r^{2}+3r$$ | **B** | Evaluate$$\sum\_{r=1}^{6}2r^{3}-1$$ |
| **C** | Evaluate$$\sum\_{r=1}^{15}3r-2$$ | **D** | Evaluate$$\sum\_{r=1}^{24}3r^{2}-7$$ |
| **E** | Evaluate$$\sum\_{r=10}^{20}15-4r^{2}$$ | **F** | Evaluate$$\sum\_{r=6}^{10}r(3r+1)$$ |
| **G** | Evaluate$$\sum\_{r=5}^{8}5r(1+r)(1-r)$$ | **H** | Given that$$\sum\_{r=1}^{15}3r^{2}+a=3975$$find the value of $a$ |
| **I** | Given that$$\sum\_{r=1}^{n}br^{3}=5n^{2}(n+1)^{2}$$find the value of $b$ | **J** | Given that$$\sum\_{r=1}^{n}c-2r=8n-n^{2}$$find the value of $c$ |
| To get the three-digit code, add all your answers together. |