



|    |  |  |
|----|--|--|
| 1  |    | $m_1 = 18$   |
| 2  |    | $m_2 = 19$   |
| 3  |    | $m_3 = 20$   |
| 4  |    | $m_4 = 21$   |
| 5  |    | $m_5 = 22$   |
| 6  |  | $m_6 = 23$   |
| 7  |  | $m_7 = 24$   |
| 8  |  | $m_8 = 25$   |
| 9  |  | ▼ current  |
| 10 |  | $p = n(k_1 + k_2 + k_3 + k_4 + k_5 + k_6 + k_7 + k_8)$ |

$$p = 69\,220\,800$$

$$k_1 = \frac{(18)(19)(20)(21)(22)(23)(24)(25) - (19 - m_1)(20 - m_1)(21 - m_1)(22 - m_1)(23 - m_1)(24 - m_1)(25 - m_1)(26 - m_1)}{8!}$$

$$k_1 = 1081574$$

$$k_2 = \frac{(19 - m_1)(20 - m_1)(21 - m_1)(22 - m_1)(23 - m_1)(24 - m_1)(25 - m_1) - (20 - m_2)(21 - m_2)(22 - m_2)(23 - m_2)(24 - m_2)(25 - m_2)(26 - m_2)}{7!}$$

$$k_2 = 0$$

$$k_3 = \frac{(20 - m_2)(21 - m_2)(22 - m_2)(23 - m_2)(24 - m_2)(25 - m_2) - (21 - m_3)(22 - m_3)(23 - m_3)(24 - m_3)(25 - m_3)(26 - m_3)}{6!}$$

$$k_3 = 0$$

$$k_4 = \frac{(21 - m_3)(22 - m_3)(23 - m_3)(24 - m_3)(25 - m_3) - (22 - m_4)(23 - m_4)(24 - m_4)(25 - m_4)(26 - m_4)}{5!}$$

$$k_4 = 0$$

$$k_5 = \frac{(22 - m_4)(23 - m_4)(24 - m_4)(25 - m_4) - (23 - m_5)(24 - m_5)(25 - m_5)(26 - m_5)}{4!}$$

$$k_5 = 0$$

$$k_6 = \frac{(23 - m_5)(24 - m_5)(25 - m_5) - (24 - m_6)(25 - m_6)(26 - m_6)}{3!}$$

$$k_6 = 0$$

$$k_7 = \frac{(24 - m_6)(25 - m_6) - (25 - m_7)(26 - m_7)}{2!}$$

$$k_7 = 0$$

18

$$k_8 = \frac{\left(25 - m_7\right) \quad - \quad \left(26 - m_8\right)}{1!} + 1$$

$k_8 = 1$

19



$p_1 = 3$

20



$p_2 = 5$

21



$p_3 = 7$

22



$p_4 = 8$

23

$$n = \frac{(5)(6)(7)(8) \quad - \quad (6 - p_1)(7 - p_1)(8 - p_1)(9 - p_1)}{4!} + \frac{(6 - p_1)(7 - p_1)(8 - p_1) \quad - \quad (7 - p_2)(8 - p_2)(9 - p_2)}{3!} + \frac{(7 - p_2)(8 - p_2) \quad - \quad ($$

$n = 64$

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