

Briç ÖDEV-1

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Soru-1- 8-3-2-0

$$\frac{4! \binom{8}{13} \binom{2}{13} \binom{2}{13}}{52!} = \frac{24 \cdot 1287 \cdot 286 \cdot 78}{52!} = \frac{689043504}{635017559600} \times 100 = 0.10850\%$$

Soru 2 - 22 Onör puanı

- 4A 2R →  $\binom{4}{4} \binom{4}{2} \binom{36}{2}$
- 4A 1R 10V →  $\binom{4}{4} \binom{4}{1} \binom{4}{1} \binom{36}{1}$
- 4A 0R 300V →  $\binom{4}{4} \binom{4}{3} \binom{36}{6}$
- 4A 0R 20 2V
- 4A 0R 10 4V
- 3A 3R 00 1V
- 3A 2R 20
- 3A 2R 10 2V
- 3A 2R 00 4V
- 3A 2R 30 1V
- 3A 1R 20 3V
- 2A 4R 10
- 2A 4R 2V
- 2A 3R 20 1V
- 2A 3R 10 2V
- 2A 2R 20 2V
- 2A 2R 10 4V
- 2A 2R 20 4V
- 2A 1R 40 3V
- A 4R 30
- A 4R 20 2V
- A 4R 10 4V
- A 3R 20 V
- A 3R 30 3V
- 0A 4R 20 2V
- 0A 4R 30 4V

26 tane olasılık var

$$\begin{aligned}
 & \binom{4}{4} \binom{5}{2} \binom{36}{2} + \binom{4}{4} \binom{4}{1} \binom{4}{1} \binom{36}{6} + \binom{4}{4} \binom{4}{3} \binom{36}{6} + \binom{4}{4} \binom{2}{2} \binom{4}{2} \binom{36}{5} + \binom{4}{4} \binom{4}{1} \binom{4}{1} \binom{36}{4} + \\
 & \binom{4}{3} \binom{4}{3} \binom{4}{1} \binom{36}{4} + \binom{4}{3} \binom{4}{2} \binom{4}{2} \binom{36}{8} + \binom{4}{3} \binom{4}{2} \binom{4}{1} \binom{4}{1} \binom{36}{5} + \binom{4}{3} \binom{2}{2} \binom{4}{4} \binom{36}{4} + \binom{4}{3} \binom{4}{1} \binom{4}{1} \binom{4}{1} \binom{36}{5} + \\
 & \binom{4}{3} \binom{4}{1} \binom{4}{2} \binom{4}{2} \binom{36}{4} + \binom{4}{2} \binom{4}{4} \binom{4}{1} \binom{36}{4} + \binom{4}{2} \binom{4}{1} \binom{4}{1} \binom{4}{1} \binom{36}{5} + \binom{4}{2} \binom{4}{3} \binom{4}{2} \binom{4}{1} \binom{36}{5} + \binom{4}{2} \binom{4}{3} \binom{4}{1} \binom{4}{1} \binom{36}{4} + \\
 & \binom{4}{2} \binom{4}{2} \binom{4}{2} \binom{36}{4} + \binom{4}{2} \binom{4}{2} \binom{4}{1} \binom{4}{1} \binom{36}{4} + \binom{4}{2} \binom{4}{2} \binom{4}{2} \binom{4}{1} \binom{36}{6} + \binom{4}{2} \binom{4}{1} \binom{4}{2} \binom{4}{1} \binom{36}{5} + \binom{4}{2} \binom{4}{1} \binom{4}{1} \binom{4}{1} \binom{36}{5} + \\
 & \binom{4}{1} \binom{4}{4} \binom{4}{3} \binom{36}{5} + \binom{4}{1} \binom{4}{4} \binom{4}{2} \binom{36}{4} + \binom{4}{1} \binom{4}{4} \binom{4}{1} \binom{36}{4} + \binom{4}{1} \binom{4}{3} \binom{4}{2} \binom{36}{5} + \binom{4}{1} \binom{4}{3} \binom{4}{1} \binom{36}{4} + \\
 & \binom{4}{1} \binom{4}{2} \binom{4}{2} \binom{36}{4} + \binom{4}{1} \binom{4}{2} \binom{4}{1} \binom{36}{4}
 \end{aligned}$$

Oranı hesaplamak için  $\binom{52}{13}$ 'e bölmeliyiz.

$$\binom{36}{2} = 8347680, \binom{36}{6} = 1947782, \binom{36}{5} = 376992$$

$$\binom{36}{8} = 30260340, \binom{36}{9} = 94143280,$$

$$\binom{36}{4} = 58905, \binom{36}{3} = 7140, \binom{36}{2} = 670$$

$$\binom{4}{1} = 4, \binom{4}{2} = 6, \binom{4}{3} = 4, \binom{4}{4} = 1, \binom{52}{13} = 635013559600$$

$$\frac{1333800036}{635013559600} = 0,00210043 \times 100 = 0,21004 \%$$