

$$\frac{2}{1} \times \frac{5}{1} \times \frac{10}{1} - 1 = 20 - 1 = 19$$

$$\frac{1}{10} = \frac{1}{10} \times \frac{2}{2} \times \frac{5}{5} \times \frac{1}{1} = \frac{1}{10}$$

$$\frac{1}{1} \times \frac{5}{1} \times \frac{2}{1} = 10$$

$$\frac{1}{1} \times \frac{3}{1} \times \frac{2}{1} = 6$$

$$\frac{2}{1} \times \frac{5}{1} \times \frac{10}{1} = 100$$

$$\frac{2}{1} \times \frac{3}{1} \times \frac{2}{1} = 12$$

$$\frac{1}{1} \times \frac{3}{1} \times \frac{1}{1} = 3$$

$$\frac{5}{1} \times \frac{1}{1} \times \frac{1}{1} = 5 \rightarrow$$

$$\frac{2}{1} \times \frac{1}{1} \times \frac{1}{1} = 2 \rightarrow$$

$$\frac{10}{1} \times \frac{1}{1} \times \frac{1}{1} = 10 \rightarrow$$

(5, 5), (10, 5), (10, 10), (10, 20), (20, 10), (20, 20), (50, 10), (10, 50), (100, 10), (10, 100), (20, 50), (50, 20), (50, 50)

$$\frac{10}{1} \times \frac{5}{1} \times \frac{1}{1} = 50$$

$$\frac{1}{10} = \frac{1}{10} \times \frac{2}{2} \times \frac{1}{1} = \frac{1}{10}$$

Subject:

Date:

$$\frac{4!}{3! \cdot 1!}$$

(14)

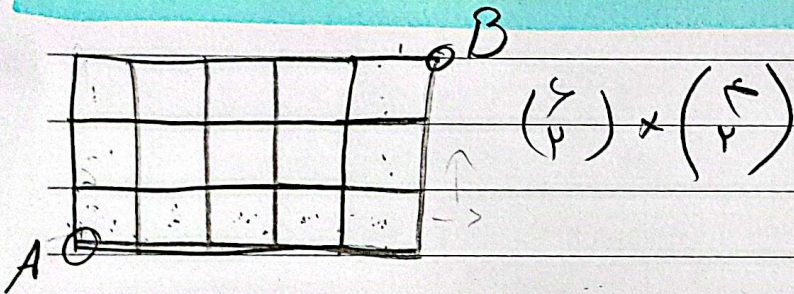
$$\frac{4!}{2! \cdot 2!}$$

(15)

$$\begin{array}{cccc} 111 & 112 & 113 & 123 \\ \downarrow & \downarrow & \downarrow & \downarrow \\ \frac{3!}{3!} = 1 & \frac{3!}{2! \cdot 1!} = 3 & \frac{3!}{1! \cdot 1! \cdot 1!} = 6 & \frac{3!}{1! \cdot 1! \cdot 1!} = 6 \end{array}$$

(16)

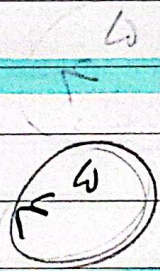
$$\begin{array}{cc} 221 & 222 \\ \downarrow & \downarrow \\ \frac{3!}{2! \cdot 1!} = 3 & \frac{3!}{3!} = 1 \end{array} \quad \therefore \frac{3!}{2! \cdot 1!} + \frac{3!}{3!} = 4 = \boxed{A}$$



(17)

$$\boxed{RRRBBB} \quad \frac{6!}{3! \cdot 3!} = \binom{6}{3} \cdot \binom{3}{3}$$

(18)



(19)

$$\binom{4}{0} + \binom{4}{1} + \binom{4}{2} + \binom{4}{3} + \binom{4}{4} = 1 + 4 + 6 + 4 + 1 = 16$$

(20)

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