

mobius

Probability Counting - Duplicate Orders in 5 Letters, 1 Repeat - to Equation



| How many ways c these letter tiles b ordered to spell | oe Z | ^B 3 ⋅ 2 ⋅ 2 | 2 G | R | A | lette | | |
|---|---|------------------------------|------------|-----------|--|----------------|-------------------------------|---|
| BY | | $25 \cdot 4 \cdot 3 \cdot 2$ | S | S | | A | $\frac{1}{2\cdot 1}$ | ^B 2·3·2 |
| DIT | E 2 2 | F 1 | | | | С | $\frac{2}{2\cdot 1}$ | D 2·2 |
| | 3 · 2 | $\overline{3\cdot 2\cdot 1}$ | | | | E | 2 | ^F 3·2 |
| 3 P I Z | How many ways letter tiles be order 'PIZZA'? Show multiplicati | red to spell w as a | 4 T | 0 | T | lette | | |
| ZA | $\begin{array}{c c} A & 2 & B \\ \hline 2 \cdot 1 & \end{array}$ | 3 · 2 | E | M | | A | $\frac{2}{2\cdot 1}$ | B 3·2 |
| | $ \begin{array}{c c} C & \frac{1}{2 \cdot 1} \end{array} $ | 2 · 2 | |) | | ^c 4 | . 3 . 2 | $\begin{array}{ccc} D & \frac{1}{2\cdot 1} \end{array}$ |
| | ^E 4 · 3 · 2 | 2 | | | | E | 2 | F 2 · 2 |
| 5 A P P | How many ways letter tiles be order 'APPLE'? Sho multiplicati | red to spell w as a | | these let | ny ways ca tter tiles b d to spell | e | | 2 3 · 2 · 2 |
| LE | A 3 · 2 | $\frac{2}{2\cdot 1}$ | | | , | | $\frac{^{c}}{3\cdot 2\cdot }$ | _ |
| | ^C 2 | 4 · 3 · 2 | В | Y | | | 5·2· | F |
| | E 2.3.2 F | 1 | | | | | 3 · 2 | 2 3 · 2 · 3 · 2 |

| | these letter tiles be ordered to spell | | | |
|---|---|---|--|--|
| S | A | S | | |
| | | | | |

How many ways can

| | $3 \cdot 2 \cdot 2$ |
|------------------------------|-----------------------------|
| $\overline{3\cdot 2\cdot 1}$ | 5 2 2 |
| С | D |
| $4 \cdot 3 \cdot 2$ | $3 \cdot 2 \cdot 3 \cdot 2$ |
| | |
| E 1 | F |
| T | 3.2 |
| $\overline{3\cdot 2\cdot 1}$ | 5 2 |
| J 2 1 | |

В

 $^{\mathsf{E}} \ 2 \cdot 3 \cdot 2$



| 'FOOLS'? Show as a multiplication. | | | | | |
|------------------------------------|----------------------|---|-----------|--|--|
| Α | $2 \cdot 3 \cdot 2$ | В | 4 · 3 · 2 | | |
| С | $\frac{2}{2\cdot 1}$ | D | 2 · 2 | | |
| Е | 2 | F | 1 | | |

How many ways can these

 $\overline{2\cdot 1}$