

## mobius

## **Probability Counting - Duplicate Orders** in 4 Letters, 1 Repeat - to Equation



1 E N	How many way letter tiles be ord 'TENT'? Sh multiplica	lered to spell ow as a		How many ways can these tter tiles be ordered to spell 'PREP'? Show as a multiplication.
T	<sup>A</sup> 4 · 3 · 2	<sup>B</sup> 2 · 3 · 2	P	4 · 3 · 2 B 2 · 3 · 2
	$ \begin{array}{ccc} C & \frac{1}{2 \cdot 1} \end{array} $	<sup>D</sup> 2	С	$\frac{1}{2\cdot 1}$ D $3\cdot 2$
	E 2·2	$F \qquad \frac{2}{2\cdot 1}$	E	$2$ $\begin{bmatrix} F & \frac{2}{2 \cdot 1} \end{bmatrix}$
How many ways can these letter tiles be ordered to spell 'BUE	BB'? 3 · 2	$ \begin{array}{c c} 2 & 4 \cdot 3 \cdot 2 \\ 2 & \frac{1}{3 \cdot 2 \cdot 1} \\  & 7 & 2 \end{array} $	How many ways can these letter tiles be ordered to spell 'SASS'?  S A S	$ \begin{array}{c c}  & & & \\  & 3 \cdot 2 \cdot 3 \cdot 2 \\  & 5 \cdot 4 \cdot 3 \cdot 2 \\  & 3 \cdot 2 \cdot 1 \end{array} $ $ \begin{array}{c c}  & & \\  & 3 \cdot 2 \cdot 2 \end{array} $ $ \begin{array}{c c}  & & \\  & 3 \cdot 2 \cdot 2 \end{array} $ $ \begin{array}{c c}  & & \\  & 4 \cdot 3 \cdot 2 \end{array} $ $ \begin{array}{c c}  & & \\  & 3 \cdot 2 \cdot 2 \end{array} $
How many ways can these letter tiles be ordered to spell 'FEET'? Show as a multiplication.			How many ways can these letter tiles be ordered to spell 'TATT'?  A  T  A  T	$\begin{bmatrix} A & 2 & B & 1 \\ \hline 3 \cdot 2 \cdot 1 & \hline 3 \cdot 2 \cdot 1 \end{bmatrix}$
T	A 2 · 3 · 2	B 3·2	T	3 · 2 4 · 3 · 2
	$\begin{array}{ccc} & 2 \cdot 2 \\ & & \\ & & \\ \hline & & \\ & & \\ \hline \end{array}$	F 2		$\begin{bmatrix} 5 & 5 & 4 & 3 & 2 \end{bmatrix}$
7 How many ways can these letter tiles be ordered to spell	3 · 2	$\frac{1}{2} \begin{bmatrix} 3 & 3 & 2 \\ 4 & 3 & 2 \end{bmatrix}$		How many ways can these tter tiles be ordered to spell 'HUSH'? Show as a multiplication. $ \begin{array}{ccc} 2 \cdot 2 & & \frac{B}{2 \cdot 1} \\ & & & \end{array} $
	3 · 2 ·	_	E	$2$ $\begin{bmatrix} F & \frac{1}{2 \cdot 1} \end{bmatrix}$