



Math worksheet on 'Probability Counting - Choose N  
Count of Total Outcomes - To Factorial Equation (Le  
broader unit on 'Probability and Statistics - Perr  
Combinations Calculating - Practice

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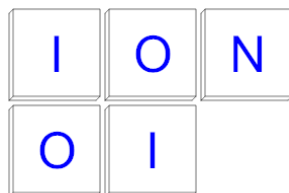
1



How many total ways can 2  
letter tiles be drawn from this  
set? Show as a factorial.

<b>a</b>	$\frac{6!}{2! \cdot 4!}$	<b>b</b>	$\frac{2!}{6! \cdot 4!}$
<b>c</b>	$\frac{8!}{3! \cdot 5!}$	<b>d</b>	$\frac{6!}{4!}$

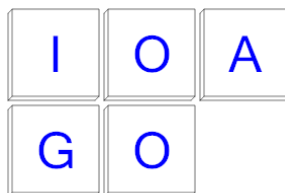
2



How many total ways can 3  
letter tiles be drawn from this  
set? Show as a factorial.

<b>a</b>	$\frac{4!}{2! \cdot 2!}$	<b>b</b>	$\frac{5!}{4! \cdot 1!}$
<b>c</b>	$\frac{3!}{5! \cdot 2!}$	<b>d</b>	$\frac{5!}{2!}$
<b>e</b>	$\frac{5!}{3! \cdot 2!}$		

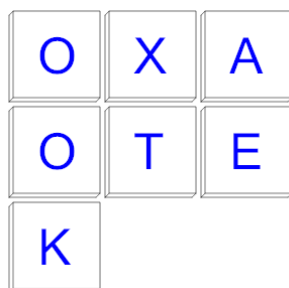
3



How many total ways can 2  
letter tiles be drawn from this  
set? Show as a factorial.

<b>a</b>	$\frac{3!}{3! \cdot 0!}$	<b>b</b>	$\frac{5!}{2! \cdot 3!}$
<b>c</b>	$\frac{6!}{2! \cdot 4!}$	<b>d</b>	$\frac{4!}{2! \cdot 2!}$
<b>e</b>	$\frac{2!}{5! \cdot 3!}$	<b>f</b>	$\frac{5!}{3!}$

4



How many total ways can 3  
letter tiles be drawn from this  
set? Show as a factorial.

<b>a</b>	$\frac{3!}{7! \cdot 4!}$	<b>b</b>	$\frac{7!}{3! \cdot 4!}$
<b>c</b>	$\frac{7!}{4!}$		

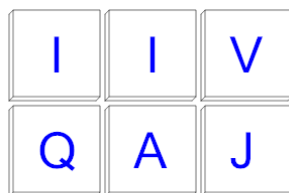
5



How many total ways can 2  
letter tiles be drawn from this  
set? Show as a factorial.

<b>a</b>	$\frac{4!}{2! \cdot 2!}$	<b>b</b>	$\frac{2!}{5! \cdot 3!}$
<b>c</b>	$\frac{5!}{3!}$	<b>d</b>	$\frac{5!}{2! \cdot 3!}$
<b>e</b>	$\frac{5!}{4! \cdot 1!}$		

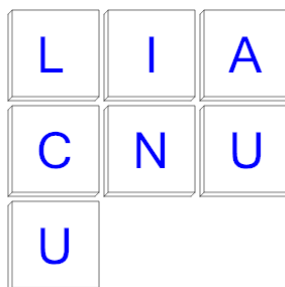
6



How many total ways can 2  
letter tiles be drawn from this  
set? Show as a factorial.

<b>a</b>	$\frac{6!}{4! \cdot 2!}$	<b>b</b>	$\frac{6!}{2! \cdot 4!}$
<b>c</b>	$\frac{2!}{6! \cdot 4!}$	<b>d</b>	$\frac{5!}{2! \cdot 3!}$
<b>e</b>	$\frac{7!}{4! \cdot 3!}$	<b>f</b>	$\frac{6!}{4!}$

7



How many total ways can 2  
letter tiles be drawn from this  
set? Show as a factorial.

<b>a</b>	$\frac{2!}{7! \cdot 5!}$	<b>b</b>	$\frac{8!}{3! \cdot 5!}$
<b>c</b>	$\frac{7!}{2! \cdot 5!}$	<b>d</b>	$\frac{7!}{5!}$