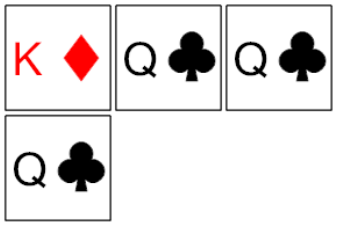
Math worksheet on *'Probability Counting - Ways to O 4 Cards, 1 Repeat - to Equation (Level 1)'*. Part of broader unit on *'Probability and Statistics - Probabil with Factorials Intro'*

Learn online:

app.mobius.academy/math/units/probability_and_statistics_probability_with_factorials

1 How many distinct ways can these cards be ordered? Show as a multiplication.



a $\frac{4 \cdot 3 \cdot 2}{4 \cdot 3 \cdot 2 \cdot 1}$

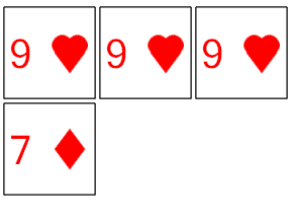
b $\frac{5 \cdot 4 \cdot 3 \cdot 2}{3 \cdot 2 \cdot 3 \cdot 2}$

c $\frac{6 \cdot 5 \cdot 4 \cdot 3 \cdot 2}{2 \cdot 3 \cdot 2}$

d $\frac{4 \cdot 3 \cdot 2}{2 \cdot 3 \cdot 2}$

e $\frac{4 \cdot 3 \cdot 2}{3 \cdot 2}$

2 How many distinct ways can these cards be ordered? Show as a multiplication.



a $\frac{4 \cdot 3 \cdot 2}{5 \cdot 4 \cdot 3 \cdot 2}$

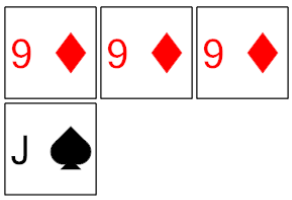
b $\frac{4 \cdot 3 \cdot 2}{3 \cdot 2}$

c $\frac{4 \cdot 3 \cdot 2}{4 \cdot 3 \cdot 2 \cdot 1}$

d $\frac{5 \cdot 4 \cdot 3 \cdot 2}{3 \cdot 2}$

e $\frac{3 \cdot 2}{3 \cdot 2}$

3 How many distinct ways can these cards be ordered? Show as a multiplication.



a $\frac{3 \cdot 2}{3 \cdot 2}$

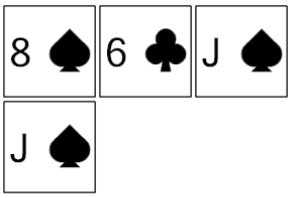
b $\frac{4 \cdot 3 \cdot 2}{5 \cdot 4 \cdot 3 \cdot 2}$

c $\frac{4 \cdot 3 \cdot 2}{4 \cdot 3 \cdot 2 \cdot 1}$

d $\frac{4 \cdot 3 \cdot 2}{3 \cdot 2}$

e $\frac{4 \cdot 3 \cdot 2}{4 \cdot 3 \cdot 2}$

4 How many distinct ways can these cards be ordered? Show as a multiplication.



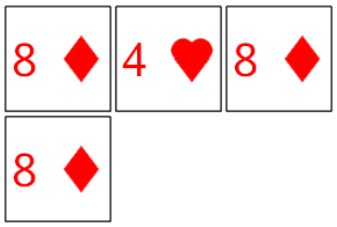
a $\frac{5 \cdot 4 \cdot 3 \cdot 2}{2}$

b $\frac{4 \cdot 3 \cdot 2}{2 \cdot 3 \cdot 2}$

c $\frac{4 \cdot 3 \cdot 2}{4 \cdot 3 \cdot 2 \cdot 1}$

d $\frac{4 \cdot 3 \cdot 2}{2}$

5 How many distinct ways can these cards be ordered? Show as a multiplication.



a $\frac{4 \cdot 3 \cdot 2}{4 \cdot 3 \cdot 2 \cdot 1}$

b $\frac{4 \cdot 3 \cdot 2}{3 \cdot 2}$

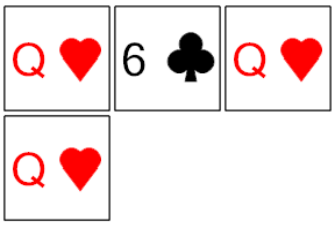
c $\frac{4 \cdot 3 \cdot 2}{3 \cdot 2 \cdot 3 \cdot 2}$

d $\frac{6 \cdot 5 \cdot 4 \cdot 3 \cdot 2}{3 \cdot 2 \cdot 3 \cdot 2}$

e $\frac{6 \cdot 5 \cdot 4 \cdot 3 \cdot 2}{3 \cdot 2}$

f $\frac{4 \cdot 3 \cdot 2}{5 \cdot 4 \cdot 3 \cdot 2}$

6 How many distinct ways can these cards be ordered? Show as a multiplication.



a $\frac{6 \cdot 5 \cdot 4 \cdot 3 \cdot 2}{3 \cdot 2}$

b $\frac{3 \cdot 2}{3 \cdot 2}$

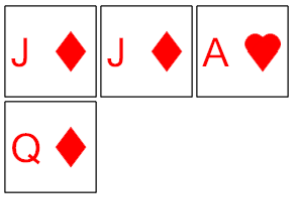
c $\frac{4 \cdot 3 \cdot 2}{4 \cdot 3 \cdot 2 \cdot 1}$

d $\frac{5 \cdot 4 \cdot 3 \cdot 2}{2 \cdot 3 \cdot 2}$

e $\frac{4 \cdot 3 \cdot 2}{4 \cdot 3 \cdot 2}$

f $\frac{4 \cdot 3 \cdot 2}{3 \cdot 2}$

7 How many distinct ways can these cards be ordered? Show as a multiplication.



a $\frac{4 \cdot 3 \cdot 2}{4 \cdot 3 \cdot 2 \cdot 1}$

b $\frac{4 \cdot 3 \cdot 2}{3 \cdot 2}$

c $\frac{4 \cdot 3 \cdot 2}{2 \cdot 3 \cdot 2}$

d $\frac{4 \cdot 3 \cdot 2}{2}$

e $\frac{4 \cdot 3 \cdot 2}{4 \cdot 3 \cdot 2}$

f $\frac{3 \cdot 2}{2}$