

Home: 73 & 74Finish Factorial Worksheet Due Thurs.page 633 #9-23 Due Fri.Date: 1/07<http://www.mathvizza.com>  
1/08Bell WorkDirections: Please simplify the following.

1.  $\left(\frac{2}{3}\right)^{-2}$

2.  $(4xy^2)^{-2} \cdot (3xy^2)$



3 min

### Objectives

1. The students will simplify expressions with factorials.
2. The students will comprehend basic vocabulary in probability.
3. The students will compute basic theoretical probabilities.


## Factorials

Definition  $n!$

Examples

1.  $4!$

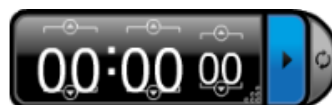
2.  $\frac{6!}{2!}$

 Let's go to the Worksheet



6 min

 Answers



2 min

Vocabulary

Trial - instance of an experiment

Experiment - a thing we do ; can measure its outcomes

Outcome - result of a trial



4 min

Describe Slope

write full  
developed  
sentences

Vocabulary

Event - prescribed outcome or prescribed group of outcomes

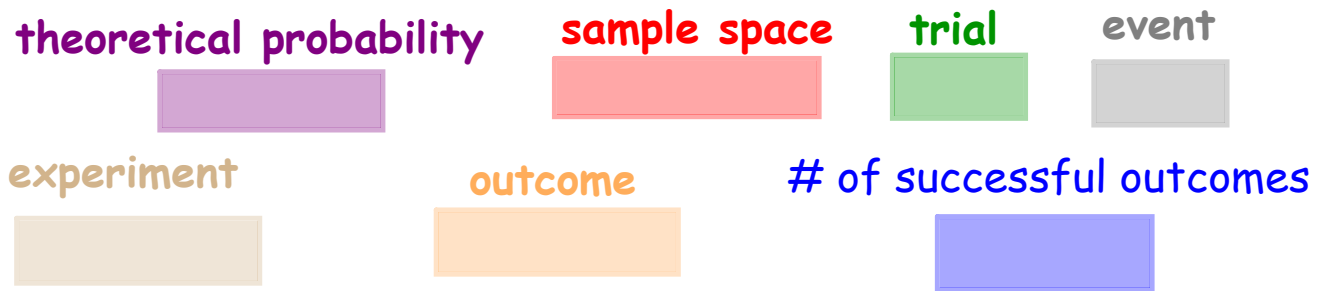
Sample Space - all possible outcomes

Experimental Probability -  $\frac{\text{measured \# of winners}}{\text{Sample Space}}$

Theoretical Probability -  $\frac{\text{total possible ways to win}}{\text{Sample Space}}$



4 min



Bob studies rolling a die. He is curious if

he will roll an even number. He rolls the die. The result is a 4.

The chance of this happening is  $\frac{3}{6}$  out of 6.

Sue studies flipping two coins. She flips the first coin and then

the second coin. The first is a head and the second is a tail. The

chance of this happening is 2 out of 4.

# Set Up a Page for Your Homework

## Theoretical Probability

Example 1. Page 633 #9



A bag contains 3 white cards, 2 black cards, and 5 red cards. Find the probability of each event for one draw.

#9. a white card

$$\frac{\text{poss. winners}}{\text{S.S.}} = \frac{3}{10} = .3$$

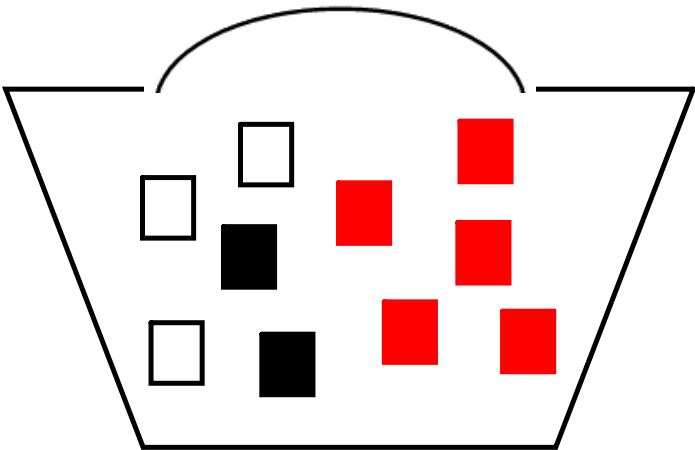
Example 2. Similar to Page 633 #20



A bus arrives at Chirag's house anytime from 7:00 to 7:07am. If all times are equally likely, find the probability that Chirag will catch the bus if he begins waiting at the given times.

7:04 am

$$\frac{4}{7}$$



number of succesful outcomes  
 sample space



$$\underline{\hspace{15em}} = \underline{\hspace{15em}}$$

