Exam Review - 1

- A student interviewed 10 teachers to determine opinions on the new late policy. This is a _____ bias.

Exam Review - 2

- Mr. Heinbuch asked a group of Grade 9 students to raise their hand if they knew of someone who went off property.
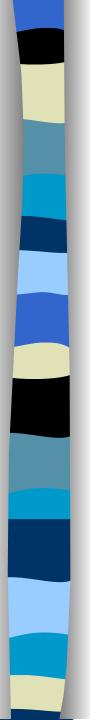
  This is a _____ bias.

Exam Review - 3

- For permutations, _____ matters. It does not for combinations

Exam Review - 4

- How many permutations are there of the word GREAT. (Fully solve).

Exam Review - 5

- How many permutations are there of the name FREEMAN. (Give answer in factorial form).
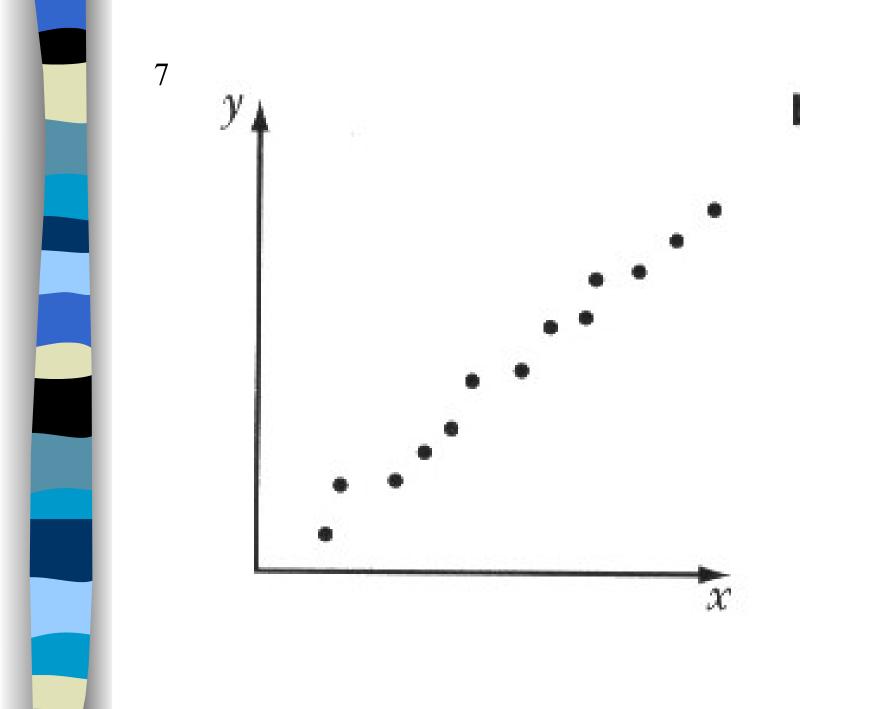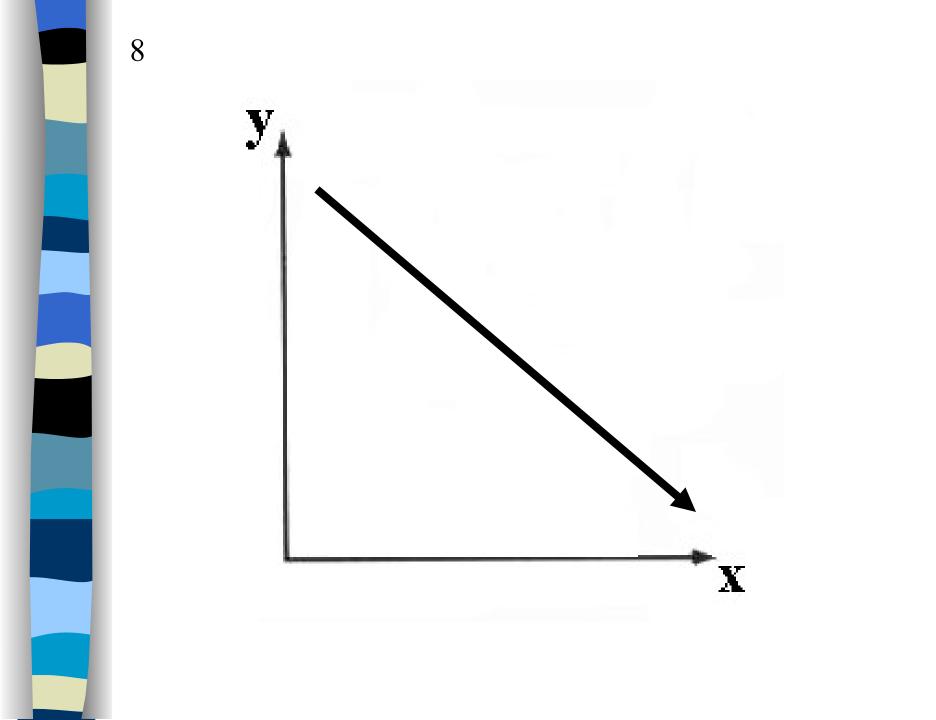
Exam Review - 6

- nCr = _____ (in factorial form)

Exam Review

- For each situation on the following 8 slides, identify what type of correlation exists.
  - Ex: Moderate, Negative, Linear Correlation

I

8

9
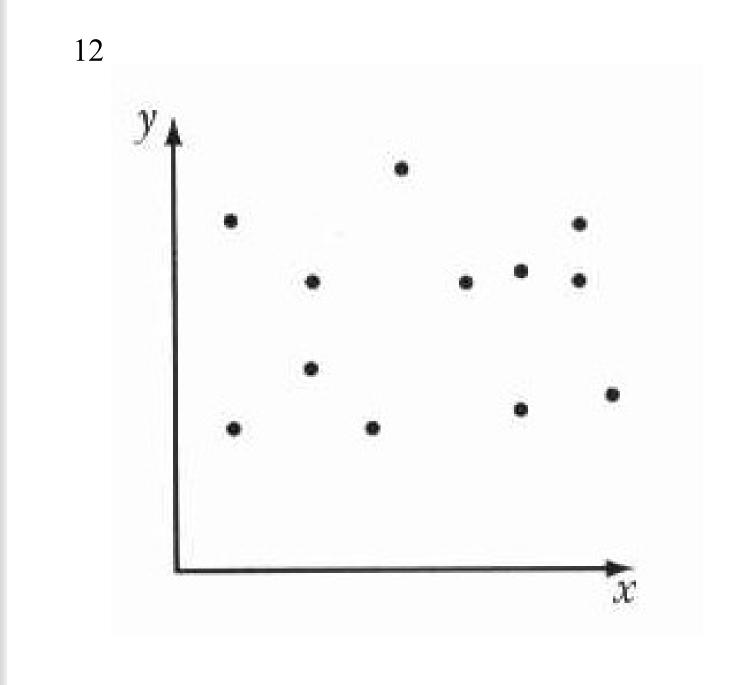
$$r = -0.0023$$

Outside Air temperature & Average Perspiration Rate (how much you sweat)

$$r = 0.5$$

12

Outside Air temperature & Number of fans used per household

$$r = \text{-}0.821$$

Draw and label a tree diagram to represent flipping a coin 3 times

Draw the normal distribution curve—label the mean and $\pm$ one standard deviation

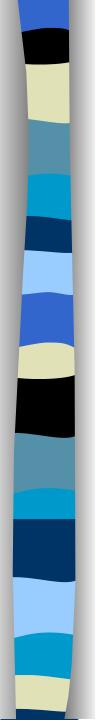Draw a Venn Diagram to represent 2 **mutually exclusive** sets of data

Create a data set that has:

n = 5

mean = median = mode = 10

standard deviation of 0

The remaining slides are Counting and Probability questions. Use any method to solve the problem.

LEAVE ANSWERS IN FACTORIAL OR PERMUTATION/COMBINATION FORM!

There are 10 different toppings at the Yonge-Dundas hot-dog stand. In how many ways could you choose 3 toppings for your street meat?

$$_{10}C_3$$

How many permutations are there of all letters in the name BOOKKEEPER?
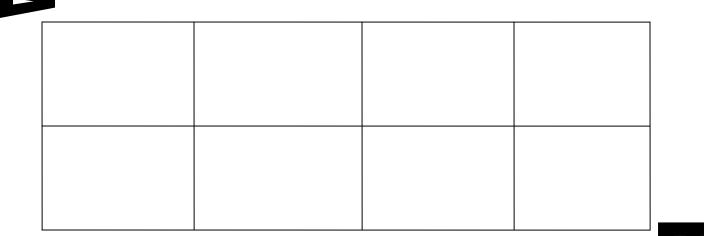
$$\frac{10!}{2!\,2!\,3!}$$

A student has 3 nickels, five dimes and four quarters in their pocket. How many ways can the student select at least one coin from her pocket?

If you guessed randomly, the probability of getting all 5 multiple choice questions correct, if there are 4 options for each, is:
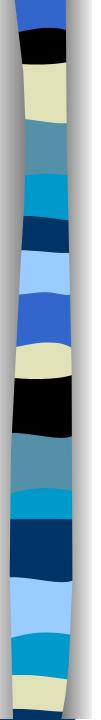
How many ways are there to get from one street corner to the other? - 23

A

B

What is the probability of:
- rolling an odd number with two dice?

25
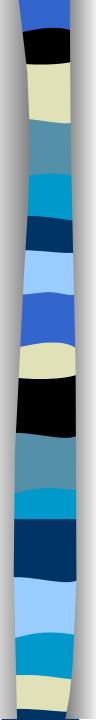
What is the probability of:
- rolling one dice twice in a row,
and having a six appear both
times?

$$\frac{1}{6} \cdot \frac{1}{6}$$

You flip a coin and roll a dice. What is the probability of:

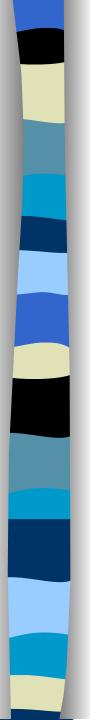- flipping a head <u>and</u> rolling a 3?

You flip a coin and roll a dice. What is the probability of:

- flipping a head <u>or</u> rolling a 3?

Name the type of distribution Uniform, Binomial, Geometric

28

Flipping a coin until a head appears.

Answer:

- Geometric

Name the type of distribution Uniform, Binomial, Geometric

29

The expected value of a ticket in a lottery.

Answer:

- Uniform

Name the type of distribution Uniform, Binomial, Geometric

30

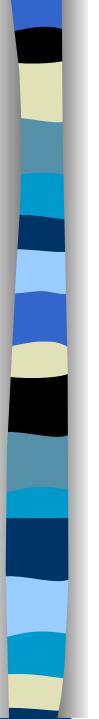Interviewing 10 students and asking their preference: coke or pepsi.

Answer:

- Binomial

From a 52 card deck, what is the probability the top card is a:

a) 4?

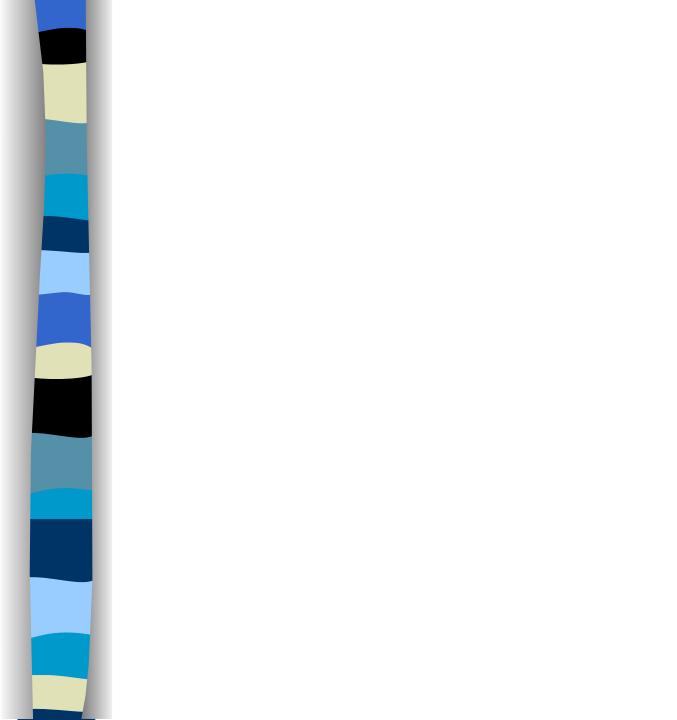b) face card or heart?

a) 1/13

b) 11/26

Without replacement, what is the probability of drawing

a) two 4's in a row?
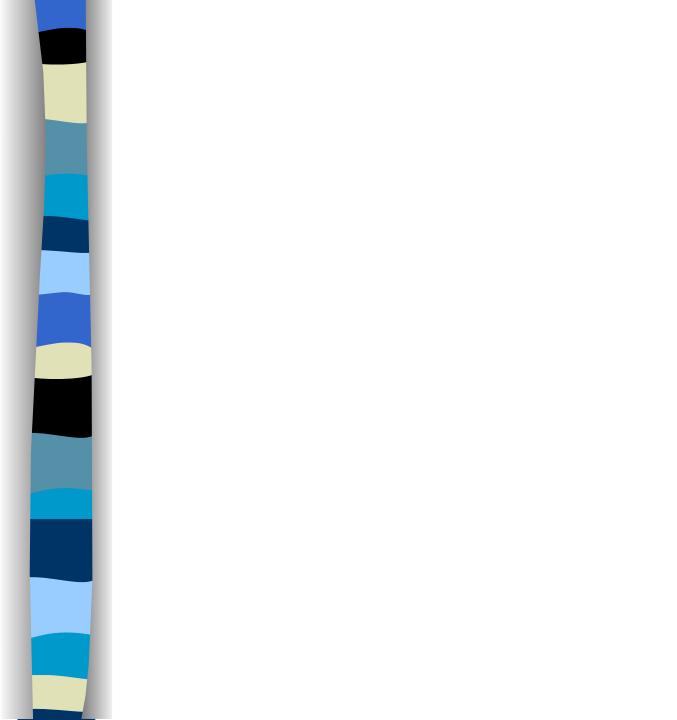
b) a face card, then an Ace?

a) 1/221

b) 4/221

From our class of 13 females and 12 males, how many groups of 3 females and 3 males be formed?

From our class of 13 females and 12 males, how many groups with more females than males can be formed?

Notes about the Exam

- Only formula provided is Confidence Intervals

- You may bring in a "cheat" sheet on the back side of the Z-score chart.

- Look over your chapter 7 and 8 Practise Tests for Review of that material