

Today's Learning Goal(s):

By the end of the class, I will:

- a) have reviewed my notes, examples and homework for this unit.
- b) be ready to do the unit 2 summative.

*Done (Spring 2017) summative.
Review and correcting 2017)*

Today and/or Tomorrow:

Review the Monty Hall Problem and discuss the solution.

Correct Wednesday's (2.4) homework: p.89 1, 2, 3
and Numeracy practice (a-g)

Correct Media Homework (2.5) from Yesterday's worksheet #1-7

Absent students must complete both excel graphs and submit them electronically.

Do homework checks from _____ .

**In class, complete today's work
pp. 94-95 #1, 2, 4, 6, 7, 10**

Today and/or Tomorrow:

Review the Monty Hall Problem and discuss the solution.

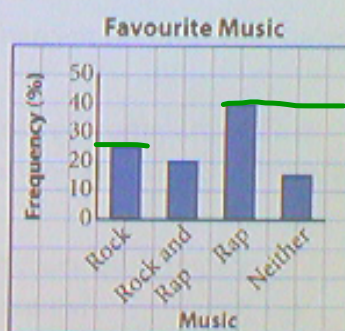
If you complete the review, work ahead and complete tomorrow's too.

Review all notes and examples to prepare for the Unit 2 Test TUESDAY!!

Homework from 2.4: p. 89

For help with question 1, refer to the Example.

1. All students in a high school were asked if they like rock, rap, both rock and rap, or neither. The results are displayed on the graph. A student from this same high school was chosen as the winner of a contest. Determine the probability that this student likes



- a) rock but not rap
 b) either rock or rap, but not both
 c) rock or rap or both

a) $P(\text{rock, but not rap})$

$$= 25\%$$

b) $P(\text{either rock or rap, but not both})$

$$= 25\% + 20\%$$

$$= 45\%$$

c) $P(\text{rock or rap or both})$

$$= 25\% + 40\% + 20\%$$

$$= 85\%$$

2. A football quarterback has completed 125 passes in 200 attempts so far this season.

- What percent of his passes has he completed?
- If he attempts 30 passes in the next game, how many would you expect him to complete?
- Suggest some factors that might affect your estimate.

a) Percent Completed

$$= \frac{125}{200}$$

$$= 0.625$$

$$= 62.5\%$$

$$\frac{x}{30} = \frac{62.5}{100}$$

$$x = \frac{30(62.5)}{100}$$

b) 62.5% of 30

$$= 18.75 \text{ passes}$$

\therefore he will complete
19 passes

$$\frac{62.5}{100} = \frac{x}{30}$$

$$100x = 30(62.5)$$

$$\frac{100x}{100} = \frac{1875}{100}$$

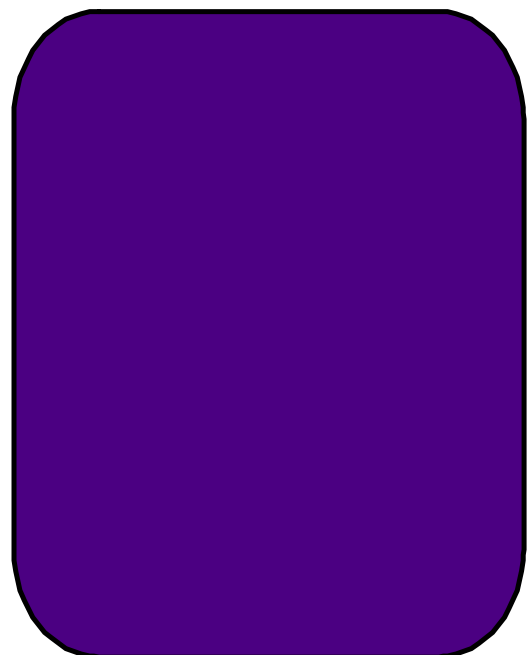
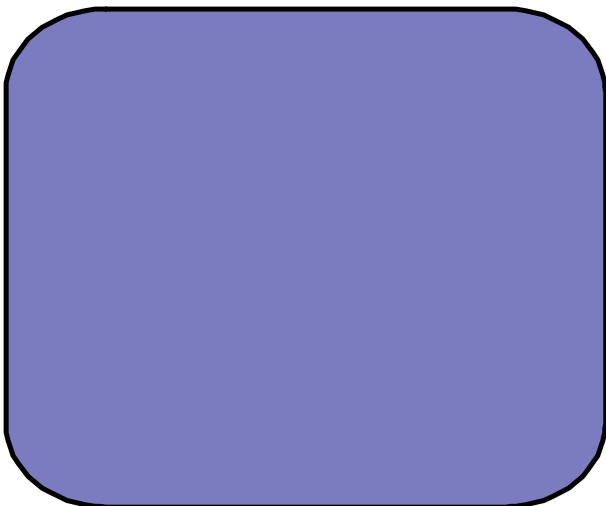
$$x = 18.75$$

3. After 12 games, the Toronto Maple Leafs have five wins, four losses, and three overtime losses. Teams are awarded two points for a win, one point for an overtime loss, and no points for a loss.

- a) How many points do the Leafs have after 12 games?
b) Predict how many points the Leafs will have if the regular season has 82 games.

$$\begin{aligned}
 3a) \text{ Number of Points} \\
 &= 2W + 0L + 1OTL \\
 &= 2W + 1OTL \\
 &= 2(5) + 1(3) \\
 &= 10 + 3 \\
 &= 13
 \end{aligned}$$

$$\begin{aligned}
 b) \left(\frac{\text{Points}}{\text{Game}} \right) \frac{13}{12} &= \frac{P}{82} \\
 \frac{P}{82} &= \frac{13}{12} \\
 P &= \frac{82 \times 13}{12} \\
 &= 88.83 \\
 &= 89 \text{ points}
 \end{aligned}$$



SEATWORK pp. 89-90 #1, 2, 3 (and Numeracy Practice below)**NUMERACY PRACTICE** (also homework)Convert each experimental probability to a **percentage**:

- a)
- $\frac{1}{4}$
- of the class does not like pizza

Answer: 25%

$$= 0.25$$

- b) 16 "Tails" in 20 coin flip trials

Answer: 80%

$$= 25\%$$

- c) 1 out of 1 million
- 1 000 000

Answer: 0.0001%

- d)
- $\frac{65}{100}$

Answer: 65%

- e) 40 winning tickets out of 285 951 200 tickets

Answer: 0.00001398%

- f) 51 winning tickets out of 146 936 000 tickets

Answer: 0.000034709%

- g) 1 winning ticket out of 13 983 816 tickets

Answer: 0.0000072%
7 151%

$$\frac{51}{146\,936\,000} =$$

$$\rightarrow = 1.3988 \times 10^{-7}$$

$$= 0.0000001398$$

$$\rightarrow 0.00001398\%$$

$$= 0.00001398\%$$

$$\frac{1}{13\,983\,816} = 0.000000072$$

$$= 0.00000072\%$$