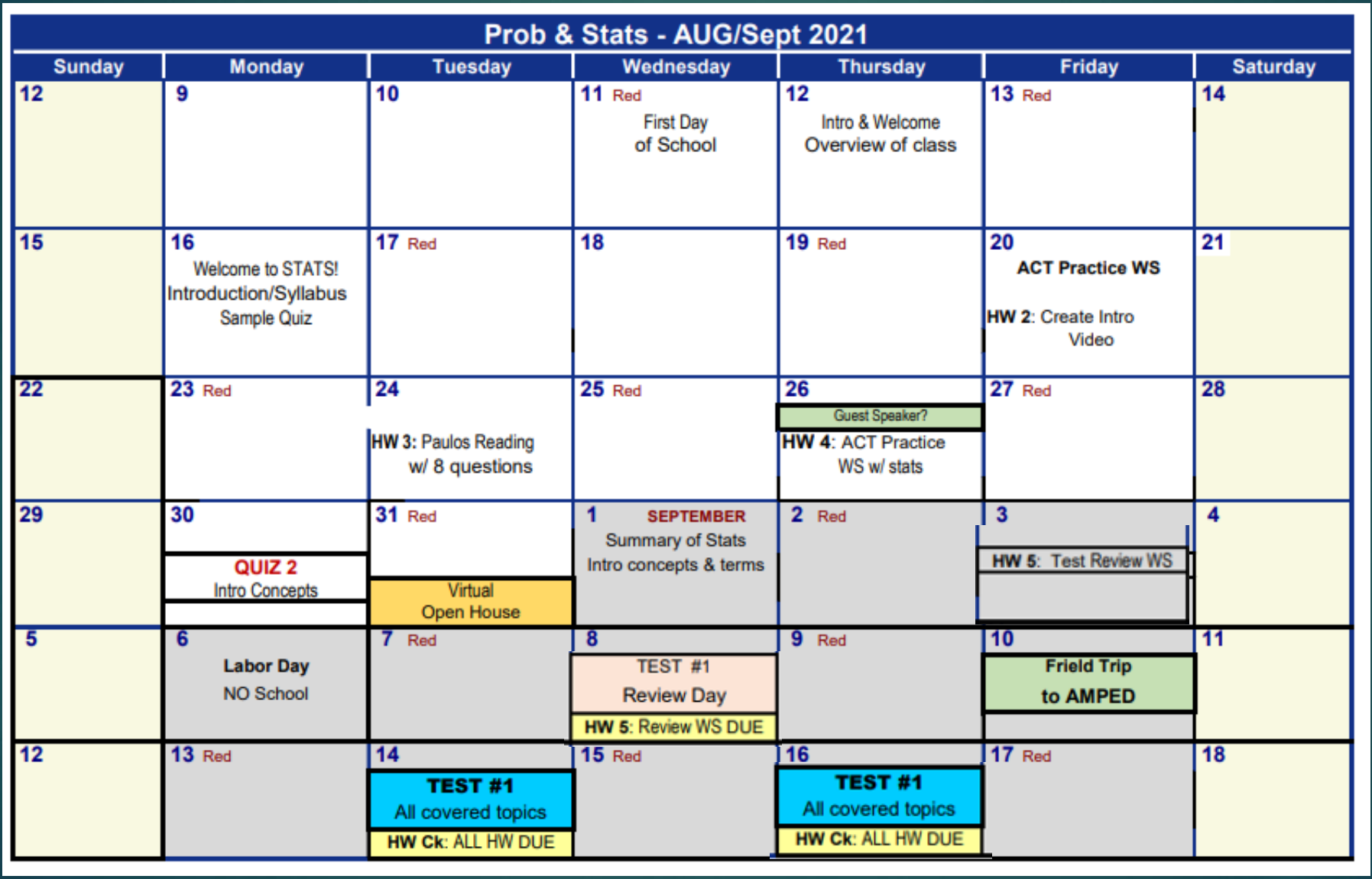
Calendar Review



Prob & Stats - AUG/Sept 2021

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
12	9	10	11 Red First Day of School	12 Intro & Welcome Overview of class	13 Red	14
15	16 Welcome to STATS! Introduction/Syllabus Sample Quiz	17 Red	18	19 Red	20 **ACT Practice WS** **HW 2**: Create Intro Video	21
22	23 Red	24 **HW 3:** Paulos Reading w/ 8 questions	25 Red	26 Guest Speaker? **HW 4**: ACT Practice WS w/ stats	27 Red	28
29	30 **QUIZ 2** Intro Concepts	31 Red Virtual Open House	1 **SEPTEMBER** Summary of Stats Intro concepts & terms	2 Red	3 **HW 5**: Test Review WS	4
5	6 **Labor Day** NO School	7 Red	8 TEST #1 Review Day **HW 5**: Review WS DUE	9 Red	10 **Frield Trip to AMPED**	11
12	13 Red	14 **TEST #1** All covered topics **HW Ck**: ALL HW DUE	15 Red	16 **TEST #1** All covered topics **HW Ck**: ALL HW DUE	17 Red	18

ACT Practice
Take out WS from last class

- Spend 5 minutes working on problems
- Circle 1 or 2 problems that are most difficult or confusing
- Be ready to share and discuss your answers and work

Understanding Percentages

HOW DO YOU FIND THE GIVEN PERCENT OF ANY NUMBER?

What are percents?

- Percent means "per 100" or "out of one-hundred"
- Any percent can be converted into an equivalent decimal form simply by **Dividing the % by 100**
- Any number (including decimals) can be converted into an equivalent percent by Multiplying the number **by 100**
- You can find any percent of a given quantity by using a simple formula, that results from a P**…PROPORTIONS**

What are proportions?

- A proportion is an equation that shows one ratio equal to another, usually displayed as one fraction set equal to another fraction
- EX: $\frac{1}{2} = \frac{3}{6}$ $\frac{5}{20} = \frac{x}{80}$ $\frac{a}{b} = \frac{c}{d}$
- We commonly use proportions to find equivalent fractions or to solve percent problems

Using a **general proportion** to solve *percentage problems*

- Different Forms of the Percent Proportion

$$\frac{percent}{100} = \frac{amount}{base}$$

$$\frac{P}{100} = \frac{"is"}{"of"}$$

$$\frac{\%}{100} = \frac{part}{whole}$$

$$\frac{percent\ you\ want}{out\ of\ 100} = \frac{resulting\ part}{of\ given\ quantity}$$

What is 42.6% of 100?

$$\frac{\%}{100} = \frac{part}{whole}$$

$$\frac{42.6}{100} = \frac{x}{100}$$

$$\frac{42.6}{100} = \frac{well\ duh!}{100}$$

Ans: $x = 42.6$

What is 27% of 64?

$$\frac{\%}{100} = \frac{part}{whole}$$

$$\frac{27}{100} = \frac{x}{64}$$

$$0.27 = \frac{x}{64}$$

$$x = 0.27(64)$$

Ans: $x = \mathbf{17.28}$

40 is *what percent* of 64?

$$\frac{\%}{100} = \frac{part}{whole}$$

$$\frac{p}{100} = \frac{40}{64}$$

$$0.625 = \frac{p}{100}$$

$$p = 0.625(100)$$

$$p = 62.5\%$$

59 is *what percent* of 190?

$$\frac{\%}{100} = \frac{part}{whole}$$

$$\frac{p}{100} = \frac{59}{190}$$

$$0.3105263\ldots \approx \frac{p}{100}$$

This symbol $\approx$ *means "approximately"*

$$p \approx 0.3105(100)$$

Ans: $p \approx 31.05\%$

49 is *55 percent* of what number?

$$\frac{\%}{100} = \frac{part}{whole}$$

$$\frac{55}{100} = \frac{49}{n}$$

$$55n = 4900$$

$$n \approx \frac{4900}{55}$$

This symbol $\approx$ *means "approximately"*

Ans: $n \approx 89.091$

Practice Time

- Practice as many or few of the 100 WS problems, knowing that **you** **are responsible to be able to solve any of these percentage problems** on the upcoming test!

Sept 14, 2021
TEST Review Day!

- Please take out your HW #5, Test Review, make sure that your name is on it, and PASS it to the FRONT of each ROW.
- Begin working on the ACT Practice problems until the WARM-UP is posted
- Complete the Warm- UP
- Video TIME – On-line TEXT
- Questions regarding the test review & test
- TEST 1: Thursday, Sept 16 (next class!)

What is the *percent increase* or *decrease*?

1) From 36 to 18

2) From 55 to 49

2) From 48 to 66

$$\frac{\%}{100} = \frac{part}{whole}$$

What is the *percent increase or decrease*?

$$\frac{\%}{100} = \frac{part}{whole}$$

$$55p = 4900$$

$$\frac{p}{100} = \frac{49}{55}$$

$$p \approx \frac{4900}{55}$$

This symbol $\approx$ *means "approximately"*

Ans: $n \approx 89.091$

Decrease of $\approx$ 10.9%

What is the *percent increase or decrease*?

$$\frac{\%}{100} = \frac{part}{whole}$$

$$\frac{p}{100} = \frac{66}{48}$$

$$48p = 6600$$

$$p \approx \frac{6600}{48}$$

This symbol $\approx$ *means "approximately"*

Ans: $n = 137.5\%$

Increase of 37.5%

WHITE 4 Class:
11 is *what percent* of 18?

$$\frac{\%}{100} = \frac{part}{whole}$$

$$\frac{p}{100} = \frac{11}{18}$$

$$\approx$$

$$0.6111\ldots = \frac{p}{100}$$

This symbol $\approx$ *means "approximately"*

$$p \approx 0.6111(100)$$

Ans: $p \approx 61.11\%$

WHITE 3 HW: *(3 students absent)*

7 is *what percent* of 16?

$$\frac{\%}{100} = \frac{part}{whole}$$

$$\frac{p}{100} = \frac{7}{16}$$

$$0.4375 = \frac{p}{100}$$

$$p \approx 0.4375(100)$$

Ans: $p = 43.75\%$ of W3 students advocated for their own learning

Percentiles: 2 Definitions of Percentile

(from On-line TEXTBOOK) There is no universally accepted, single definition of a percentile.

Definition 1 : Using the 65th percentile as an example, the 65th percentile can be defined *as the lowest score that is* ***greater than 65%*** *of the scores*.

Definition 2: The 65th percentile can also be defined as the smallest score **that is greater than or equal to 65%** of the scores.

"Unfortunately, these two definitions can lead to dramatically different results, especially when there is relatively little data. Moreover, neither of these definitions is explicit about how to handle rounding.

How to succeed in Mr. L's class

- What is an **advocate**?

Someone who supports you and tries to help you succeed

- What is an *adversary*?

A rival; Someone who works against you and gets in the way

How to succeed in Mr. L's class

- I am here to be your **ADVOCATE**, please don't treat me as an *adversary*!
- When you take the time, and make the effort, **MATH** can help you succeed, so try to avoid thinking of math as your *adversary* as well.
- Be your own **ADVOCATE!**