Welcome to WRC 1010! I'm Dr. Sarah

- Sit near others, log on to a computer, open a browser and log into https://asulearn.appstate.edu/
  If the computer is off, back of screen button
- Troubles? For today, a neighbor or I can log you in to the computer using our account if you can't get in. Tech support told me: *If students have trouble with the computer taking their ASU login info they might need to change their password at password.appstate.edu.* This takes some time so be sure to do that before next week if you can't get in.
- Introduce yourself to neighbors (and me as I walk around)
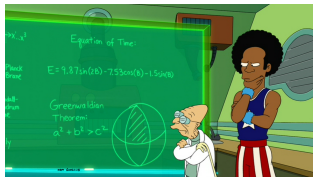
Bender's Big Score: Futurama Futurama ™and © Fox and Disney
This educational talk and related content is not specifically authorized.
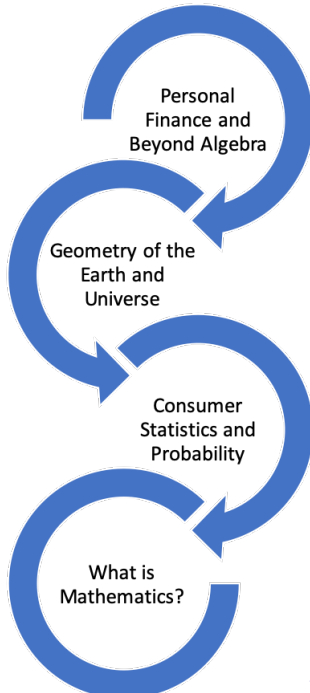
Personal Finance and Beyond Algebra

Geometry of the Earth and Universe

Consumer Statistics and Probability

What is Mathematics?

Where to Get Help

- https://support.appstate.edu/
- Lab—I'll walk around during self-paced portions so ask me when I get to you and ask neighbors if waiting
- Class—ask me anytime by calling my preferred name of Dr. Sarah, raising your hand to get my attention...
- Office hours from need help forum near top of ASULearn
- Math tutoring—info also in need help forum
- My instantaneous feedback and personalized feedback
 I care about you and your success!

Finding and Opening Software in Lab

- Access computer background for Finder—File/Find (or ⌘ f)
  - Excel

Finding and Opening Software in Lab

- Access computer background for Finder—File/Find (or ⌘ f)
  - Excel
- For Excel, often, like next week, we'll download an Excel file from the ASULearn lab found under the Tuesday listed date. On your computer, the Excel file may come up automatically or you will open it yourself.
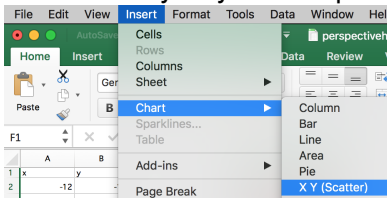
- If you prefer to use your own computer, then download Excel before next week from https://confluence.appstate.edu/display/ATKB/Microsoft+Office

Interest 10.3 in THoM

- Latin "id quod inter est" or "that which is between."
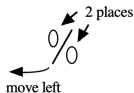- Babylonians 20% interest: 20 out of 100 = $\frac{20}{100}$ = .20

YBC 04698: 17 problems statements on interest rates, prices and profit
https://cdli.ucla.edu/dl/photo/P255010.jpg

2 places

%

move left

- percent "percentum" "out of one hundred"

Interest 10.3 in THoM

- What is 8.5% as a decimal? Discuss with a neighbor
    - a) 8.5
    - b) .085
    - c) 850
    - d) 8500
    - e) other

$$0\%_0 \quad \text{2 places}$$
move left

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Interest 10.3 in THoM

- Convert .004 to a percent? Discuss with a neighbor
  - a) .00004 %
  - b) .004 %
  - c) .4 %
  - d) 99.4 %
  - e) other

$$\underset{\text{move left}}{\overset{\text{2 places}}{\%_0^0}}$$

- percent "percentum" "out of one hundred" move left
- Babylonians 20% interest: 20 out of 100 = $\frac{20}{100}$ = .20

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- 80% of our final, pre-retirement income

  Jim Probasco "How Much Do I Need to Save to Retire: Stay on Track for
  Retirement by Knowing How Much You Need to Save by What Age"
  investopedia.com

- How would we compute the needed annual retirement
  income that is 80% of our final, pre-retirement income?
  Discuss with a neighbor
    a) multiply by 80
    b) multiply by .8
    c) multiply by 8000
    d) divide by 80
    e) divide by .8
    f) divide by 8000

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- How would we compute the needed annual retirement income that is 80% of our final, pre-retirement income?
  Discuss with a neighbor

    a) multiply by 80
    b) multiply by .8
    c) multiply by 8000
    d) divide by 80
    e) divide by .8
    f) divide by 8000

of typically means multiply in real-life contexts

YBC 04698: 17 problems statements on interest rates, prices and profit
https://cdli.ucla.edu/dl/photo/P255010.jpg

- 50-30-20 rule needs & obligations-wants-savings

  popularized by Senator Elizabeth Warren in her book *All Your Worth: The Ultimate Lifetime Money*

- How much should go into savings according to the 50-30-20 rule for a 1018 paycheck, the average weekly payment in NC in 2024 on ZipRecruiter.
  Discuss with a neighbor
    a) 203.60
    b) 305.40
    c) 509.00
    d) 20360.00
    e) 30540.00
    f) 50900.00

practice with instantaneous feedback from me, repeatable **Instantaneous Feedback** opens after you **Check** a response so you can retake it. **hover over or click "x"** for box feedback

Calculate this probability as a decimal and then convert that decimal to a percent. What is this probability written as a percent?

- ○ .4%
- ○ .004%
- ◉ .00004%
- ○ 99.6%
- ○ other

Check

If \$1000 is deposited into an account paying 5 percent interest in on

In finance we will round money to dollars and cents unless otherwise

1234.00 or 1234

\$ 3.14 ✕

Incorrect

multiply the deposit by .05, since 5%=.05 and then write as dollars and cents

Try question 1 on percent practice in ASULearn. There are different versions. Use my feedback to help! Check new responses until correct. If finished, work on questions 2 and 3.

Debt-to-Income Ratio and Percents

$$35\% = \frac{\text{monthly debt}}{\text{monthly income}}$$

STOP THE **PAYDAY LOAN** DEBT TRAP

http://stopthedebttrap.org/takeaction/ndoa/kansas-city-story/

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$$.35 = 35\% = \frac{1000}{\text{monthly income}}$$

Debt-to-Income Ratio and Percents

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$.35\text{monthly income} = 1000$

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$$.35\text{monthly income} = 1000$$
$$\text{monthly income} = \frac{1000}{.35}$$

Debt-to-Income Ratio and Percents

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STOP THE **PAYDAY LOAN** DEBT TRAP

$.35 = 35\% = \dfrac{1000}{\text{monthly income}}$

$.35 \text{monthly income} = 1000$

$\text{monthly income} = \dfrac{1000}{.35} \approx 2857.14285714 \approx 2857.14$

$\text{annual income} = 12 \times 2857.14 = 34285.68$

Tues/Thur 3:30–4:45 Activities Upstairs

- bring 1010 Personal Finance and Beyond Algebra T/Th Questions and prepare to work with peers and take notes
- it will also be useful if you bring a computer, tablet, or phone that can access webpages
- active lectures with practice, discussions and polling
- small group—help each other—and whole class activities I'm here to help!
- individual and group assessments

no eating or drinking in class or lab, but you may step out if you need to hydrate or similar!

What is Due When in ASULearn?

- Complete "To do" and "Mark as Done" items at the passing level by the start of class whenever possible. Some items have strict deadlines.

	Mon	Between Classes	Tues	Between Classes
	intro	calculator & polling	lump	lump practice
	in	What is Math?	sum	submit handwritten PDF
	lab	1010 intro video		add ASULearn profile pic
		percent practice		add Zoom profile pic

Mistakes are...
Expected
Respected
Inspected
Corrected

Where to Get Help

- Continue working on ASULearn items due tomorrow
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http://alangregerman.typepad.com/.a/6a00d83516c0ad53ef0168e783575e970c-800wi

Introductions!

- stand up
- last name and last initial (so I can find you on my roll)
- preferred first name—what we call you
- thoughts on your major(s) and/or what you might like to do after graduation