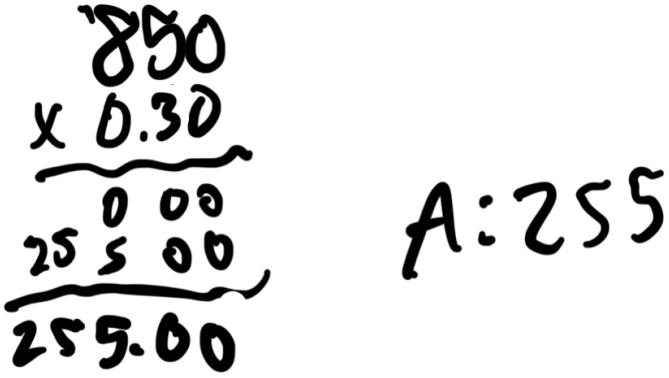
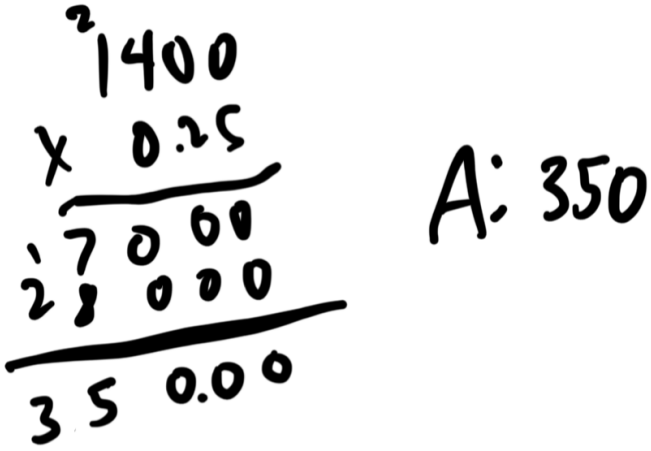
Percents

Assignment 12:
Solve the following percent problems. Make sure to show all your work!

1. 30 percent of 850



2. 25 percent of 1400



3. 80 percent of 4,286,394

10% = 428,639.4

$$\begin{array}{r} 428639.4 \\ \times \quad\quad 8 \\ \hline 3429115.2 \end{array}$$

A: 3,429,115.2

80% = 3,429,115.2

4. 38 is what percent of 190?

$$\begin{array}{r} 190 \\ \times \ .38 \\ \hline 1520 \\ 5700 \\ \hline 72.20 \end{array}$$

A: 72.20

5. In a state election, a candidate received 3,170,315 vote of 7,594,829 votes cast. What percentage of the vote did she receive? Round to 2 positions after the decimal point.

10% = 759,482.9

Long Division Method

$$759483\overline{)3037932} \quad 6000004 \rightarrow 40\%$$

$$-3037932$$

$$132383$$

1% = 75948.29

$$75948\overline{)132383} \quad 000001 \rightarrow 1\%$$

$$-75948$$

$$56435$$

0.1% = 7594.829

$$7595\overline{)56435} \quad 00007 \rightarrow 0.7\%$$

$$-53165$$

$$3270$$

0.01% = 759.4829

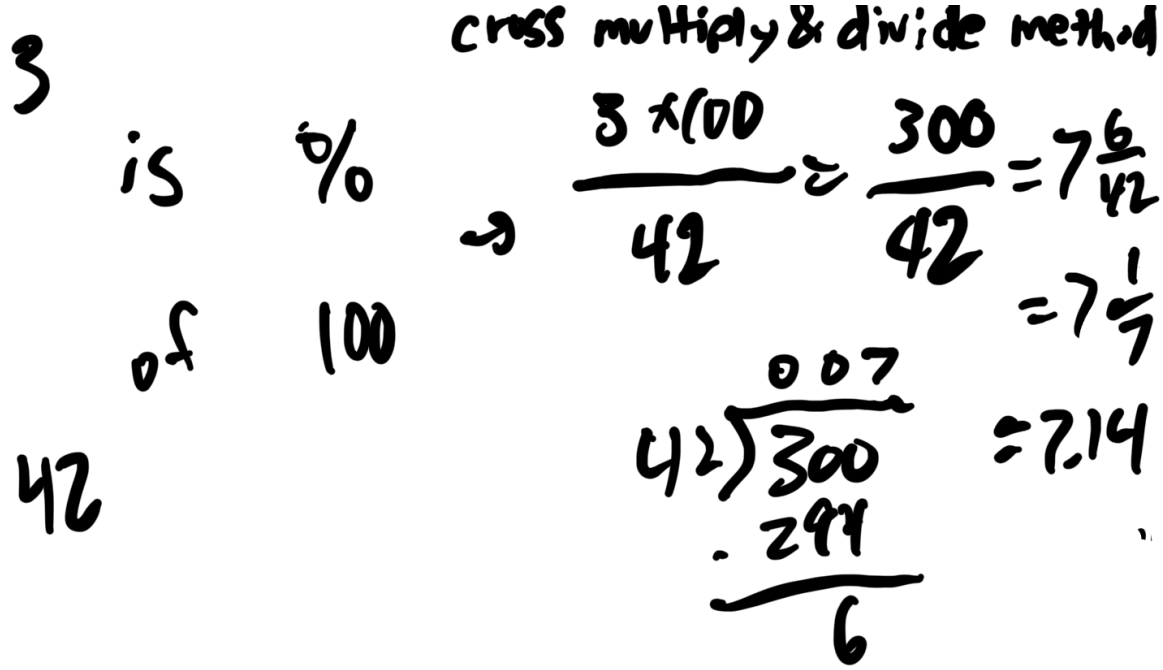
$$759\overline{)3270} \quad 0004 \rightarrow 0.04\%$$

$$-3036$$

$$234$$

A: 41.74%

6. On a multiple choice test, you got 3 questions wrong out of 42 questions. What percentage did you get right? Round to 2 positions after the decimal point.



A:

I got right 7.14% of the questions.

7. In a federal election, a candidate's exit polls included 9753 voters responding. Of these voters, the following statistic was developed, with the first column showing the percentage of all of the voters who affiliated with a certain religion. The second and third columns show how those voters divided up among the two candidate.

		Candidate A	*Candidate B*	

Protestant or other Christian	53%	42%	57%	
Catholic	25%	50%	48%	
Jewish	2%	69%	30%	
Something else	7%	74%	23%	
None	12%	70%	26%	

Based on this information, how many of the voters were in the “something else” category? Of the voters in the “something else” category, how many voted for candidate A? Round your answers to the nearest whole number (These are people, we can’t have 0.71 of a person voting!)

7% of 9753 → $\frac{7 \times 9753}{100} = 682.71$

$= 683$

A: 683 voters were "Something else".

74% of 9753 → $\frac{74 \times 9753}{100} = 7217.22$

$= 7217$

A: 7,217 "something else" voters voted for candidate A.

8. Refer back to the statistic in Question 7. How many of the voters were Jewish? How many of the Jewish voters voted for Candidate B? Round your answers to the nearest whole number.

2% of 9753 → $\frac{2 \times 9753}{100} = 195.06$

$= 195$

A: 195 voters were "Jewish".

30% of 9753 → $\frac{30 \times 9753}{100} = 2925.90$

$= 2,926$

A: 2,926 "Jewish" voters voted for candidate B.