

Today is 10/2/17
Get out a calculator and your purple note
packet

Agenda:

Brain teaser

Estimating Percents

Lesson 2: Estimating Percentages

Most of the time in life, you will estimate percents. You probably won't bust out a pen and paper every time you need to pay a tip or figure out the discount on a shirt. If you get good at estimating percents, you'll get close enough.

| % Trick | | \$72.38 | \$58.20 | \$26.00 | \$5.55 | \$123.33 |
|------------|--|------------|---------|---------|--------|----------|
| 10% | Move decimal point one place to the left | 7.238 7 | 6 | 3 | .5 | 12 |
| 5% | Find 10% then divide by 2 (cut in half) | 3.50 | 3 | 1.5 | .25 | 6 |
| 15% | Find 10% and 5% and add together | 10.50 | 9 | 4.5 | .75 | 18 |
| 20% | Find 10% then double | 14 | 12 | 6 | 1 | 24 |
| 25% | Find 20% and 5% and add together Or Round to a # divisible by 4 and divide amount into fourths | 17.50 | 15 | 7.5 | 1.25 | 30 |
| 50% | Divide by 2 (cut in half) or (double 25%) | 36 35 | 30 | 15 | 2.5 | 60 |

Practice:

Attempt these real-world problems using **MENTAL MATH** (no calculator!):

1. A car salesman sells a 2015 Chevy Cobalt for \$12,500. If he earns a 20% commission, how much money will he make off of this sale?

$$10\% \text{ is } 1250 \times 2 = \$2500$$

2. David pays 25% income tax on his \$2,100 salary

- a. How much is the tax?

$$\text{Half of } 2100 \text{ is } 1050$$

$$\text{Half of } 1050 \text{ is } 525$$

$$\$525$$

- b. How much money does he have left after paying the tax?

$$2000 - 500 = 1500$$

$$100 - 25 = 75$$

$$\$1575$$

3. On her cell phone bill, Hannah notices that of the 340 text messages that she sent last month, 10% were sent at the cheaper night rate. How many messages did Hannah send at night? During the day?

$$10\% \text{ of } 340 = 34 \text{ at night}$$

$$340 - 34 = 306 \text{ during day}$$

4. You and your family went out to dinner at Outback to celebrate your graduation. The bill came to \$126.74. You notice your family members struggling to determine an appropriate TIP. You save the day by using your mental math skills to calculate the TIP to be \$25. Everyone thanks you and you feel proud!

Preview of next lesson

<https://www.youtube.com/watch?v=rR95Cbcjzus>

