Warm-Up Notes

MAT 100: Elementary Algebra

Fall 2026

Section 3.2 Solve Percent Applications

Install — 10 minute lesson

Objectives of this Section

- Translate and solve basic percent equations
- Solve percent applications
- Find percent increase and percent decrease
- Solve simple interest applications
- Solve applications with discount or mark-up

Skills

Introduced in this section:

No new skill introduced this section. **Also practiced:** FRC.DP (Converting Decimals and Percents), EQN.MS (Multi-step Equations), WRD.NM (Naming the model), WRD.EQ (Decoding an explicit equation).

Lesson

Every percent statement you'll ever meet — a discount, a tip, an interest rate — is really just a sentence in disguise: *this amount is that percent of this other amount.* Once you can translate the sentence into an equation, it solves exactly like any equation you already know: turn the percent into a decimal, then work the steps.

I do

Watch. Find (a) the amount of discount and (b) the discount rate. (Round to the nearest tenth of a percent if needed.) Stella bought a dinette set on sale for \$725. The original price was \$1,299. To the nearest tenth of a percent, what was the rate of discount?

We do

Together. One serving of oatmeal has eight grams of fiber, which is 33% of the recommended daily amount. What is the total recommended daily amount of fiber?

You do

Your turn. Casey deposited \$1,450 in a bank account with an interest rate of 4% per year. How much interest was earned in two years?

Your turn. Translate and solve. 50 is what percent of 40?

Practice

1. Translate and solve. 8.2% of what number is \$2.87?

2. Find (a) the amount of discount and (b) the discount rate. (Round to the nearest tenth of a percent if needed.) Larry and Donna bought a sofa at the sale price of \$1,344. The original price of the sofa was \$1,920.

3. Dimple gets paid 3,200 dollars per month. She pays 960 dollars a month for rent. What percent of her monthly pay goes to rent?

4. Robin deposited \$31,000 in a bank account with an interest rate of 5.2% per year. How much interest was earned in 3 years?