

NS1.6 Calculate the <u>percentage of increase</u> and <u>decrease</u> of a quantity.

NS1.7 Solve problems that involve discounts, markups, commissions, and profit and compute simple and compound interest.







Learning objective: Today we will solve problems that involve percent of decrease.

NS1.7 Solve problems that involve discounts, markups, commissions, and profit and compute simple and compound interest.

Solve: means to find the answer









APK

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1. Let's change 5 to a percent!

Step 1: divide the denominator of the fraction into the numerator!

Step 2 move the decimal two places to the right.

Step 3: rejoice in the correct answer

2. Show me you know how to $\frac{3}{4}$ change 4 to a percent!

60%

75%









Concept Development:

The **percent of decrease** describes how much the original amount has been reduced.

percent of decrease =

amount of difference original amount

The regular price of an MP3 player at Best Buy is \$80. This week it is on sale for \$60 which is a 25 percent decrease.









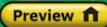
Which one shows a percent of decrease?

A. You went to the store to buy a skateboard and it was \$16. It is now on sale for \$12.

or

B. You go to the store to buy a cell phone. Last week it was \$65. This week it is \$85.







WHY is this important!

 When you become employed you may need to work out a percent of decrease.

• It is important to know if you are getting a deal at a store.

• It is important because you need to know this in 7th grade.









Finding percent of decrease: I do

A pair of jeans cost \$25. This week they are on sale for \$20. What is the percent of decrease?

Skill

I do

1. Find the amount of difference. (change)

1. 25 - 20 = 5

2. Set up the ratio (fraction) — amount of difference — 5 original amount 25

- 3. Find the decimal form.
- 4. Write as a percent. $\frac{5}{25} = 0.20 = 20\%$

From 25 to 20 is a 20% decrease.







Finding percent of decrease: We do

When Mrs. Unger went shopping she noticed that Takis were on sale at the Bridge Store. Last week they were \$8. This week they are \$6. What is the percent of decrease?

Skill We do

- 1. Find the amount of 1.8-6=2 difference. (change)
- 2. Set up the ratio (fraction)

 amount of difference

 original amount

 8
- 3. Find the decimal form.
- 4. Write as a percent. $\frac{2}{8} = 0.25 = 25\%$

From 8 to 6 is a 25% decrease.









Finding percent of decrease: We do

Arturo downloaded songs onto Pepe's Ipod for \$10. He then downloaded song's onto Oscar's Ipod for \$8. What was the <u>percent of decrease</u> between the cost of the downloads?

Skill We do

- 1. Find the amount of 1.10-8=2 difference. (change)
- 2. Set up the ratio (fraction)

 original amount

 10
- 3. Find the decimal form.
- 4. Write as a percent. $\frac{2}{10} = 0.20 = 20\%$

From 10 to 8 is a 20% decrease.









Closure

- 1. What term describes how much the original amount has been reduced?

 percent of decrease
- 2. Ms. Duncan wanted to buy tickets to a Giants game. At the stadium they cost \$40. If she buys them online they cost \$24. What is the percent of decrease?

 40% decrease
- 3. What did you learn today about solving problems that involve percent of decrease?





