

Mission Simulation - Let's Make a Deal Answer Key

Deep Thought has been thinking about what makes a good deal. First you need to see how much money you are saving. Deep Thought thinks you need to also look at the money you are spending. **For example:** Save-A-Bunch offers a deal with which you save \$1 off a purchase of \$100 dollars. Cheap Store offers a deal with which you save \$1 off a purchase of \$10.

Step One: Compare the discount to the overall amount that you are spending to find out the percentage of the discount. Next, compare the percentage of discount to figure out the better deal.

$$\frac{\text{Discount Amount}}{\text{Total Spent}} = \frac{\$1}{\$100} = 1\%$$

$$\frac{\text{Discount Amount}}{\text{Total Spent}} = \frac{\$1}{\$10} = 10\%$$

Step Two: Explain which store, Save-A-Bunch or Cheap Store, offers a larger percentage discount.

Answers will vary but should include that Cheap Store offers a 10% discount which is bigger than Save-A-Bunch, which only offers a 1% discount.

Step Three: Compare the three coupons below. Figure out which coupon offers the largest percentage discount.

Coupon 1

Spend \$50 and
get \$12 off

Coupon 2

Spend \$75 and
get \$15 off

Coupon 3

Spend \$800 and
get \$64 off

Show all work here:

Coupon 1: $12/50 \rightarrow 24/100 \rightarrow 24\%$ discount

Coupon 2: $15/75 \rightarrow 1/5 \rightarrow 20/100 \rightarrow 20\%$ discount

Coupon 3: $64/800 \rightarrow 8/100 \rightarrow 8\%$ discount

Step Four: Write which coupon offers the largest percentage discount and explain how you arrived at your answer above using words, numbers, symbols and or pictures.

Answers will vary. Students will likely explain that they created a fraction comparing the discount to the overall spending amount and converted that fraction to a percent to find the percentage discount. All students should say that coupon 1 offers the largest percentage discount.