

11. Mixed Application — Worksheet C

Name: _____ **Class:** _____ **Date:** _____

Before solving, identify the original amount, percent change, direction, and final amount.

1. A bike costs \$300 and is 20% off. Find the sale price.

2. A meal costs \$45. A 15% tip is added. Find the total.

3. A store buys a jacket for \$80 and marks it up 40%. Find the selling price.

4. A student subtracts 15 from \$60 for a 15% discount. Explain the mistake.

5. A phone plan of \$50 increases by 8%. Find the new cost.

6. A value of 180 decreases by 25%. Find the final value.

7. A \$100 item is discounted by 20% and then taxed by 10%. Track the base at both steps.

8. Compare a 20% discount on \$50 with a 20% discount on \$200. Explain why the discount amounts differ.

9. Create a real-world percent increase problem and solve it.

10. Create a real-world percent decrease problem and solve it.

11. **What matters and what doesn't:** A jacket costs \$120 and is on sale during a 3-day weekend event, alongside 5 other discounted items. The jacket itself is 30% off. What is its sale price? Which details in this problem were not needed to answer it?

12. **Reconstruct the situation:** The equation $45 = 0.15 \times 300$ represents a real percent-change situation. Write a context for it (a discount, tax, tip, markup, increase, or decrease), and explain what the 300, the 0.15, and the 45 each mean.
