

Increase and Decrease

GRADE 7

MATHEMATICS

B2.3

Two steps. Find the percent first, then decide whether it goes on or comes off. To increase \$50 by 10%, find \$5 and add it, giving \$55. To decrease, take the same \$5 away.

PART A: FIND THE PERCENT

1. 10% of \$50 is \$_____.
2. 25% of \$40 is \$_____.
3. 50% of \$70 is \$_____.
4. 100% of \$30 is \$_____.

PART B: ADD IT ON, TAKE IT OFF

5. \$50 increased by 10% is \$_____.
6. \$40 decreased by 25% is \$_____.
7. \$70 decreased by 50% is \$_____.
8. \$30 increased by 100% is \$_____.

PART C: QUICK CHECKS

9. Increasing an amount by 100% means:
(A) doubling it (B) halving it (C) leaving it the same
10. \$80 decreased by 50% is:
(A) \$40 (B) \$30 (C) \$120

PART D: BONUS AND SALE

- 11.** Terrence earns \$36 a week and is given a 25% bonus. What is his new weekly pay?

SHOW YOUR WORK

Answer: _____

- 12.** A \$60 reward is cut by 10% on sale day. What is the new price?

SHOW YOUR WORK

Answer: _____

PART E: BUILD FIVE PERCENT

- 13.** Explain how to increase an amount by 5% in your head by finding 10% first. Use \$80 as your example.

Increase and Decrease

ANSWER KEY

1. 5
2. 10
3. 35
4. 30
5. 55
6. 30
7. 35
8. 60
9. A) doubling it
10. A) \$40
11. \$45.
12. \$54.
13. Find 10%, which is \$8, then halve it to get 5%, which is \$4, then add that on to reach \$84.

TEACHER NOTES

Reduced expectations: the percent is found in Part A before Part B asks for the whole two-step change, and every amount is chosen so the benchmark percent comes out whole. The Standard sheet in this unit builds awkward percents and runs changes in both directions.