Compound Interest

Name: _____	Date: _____	Score: _____ / 18

Quick Review and Helpful Hints

Compound interest earns interest on the interest already earned. For yearly compounding, the amount is $A = P(1 + r)^t$, where P is the principal, r is the rate (as a decimal), and t is the number of years. The interest earned is $A - P$.

▷ **Example:** Find the amount on $\$100$ at 10% for 2 years (compounded yearly). **Work:** $A = 100(1.10)^2 = 100(1.21)$.

★ **Answer:** $\$121$

Interest grows on interest.

Practice Problems

Find the amount (or interest, where asked).

1. $\$100$ at 10%, 1 yr _____

2. $\$100$ at 10%, 2 yr _____

3. $\$200$ at 10%, 1 yr _____

4. $\$100$ at 20%, 1 yr _____

5. $\$100$ at 100%, 1 yr _____

6. $\$500$ at 10%, 1 yr _____

7. $\$100$ at 50%, 1 yr _____

8. $\$1000$ at 10%, 1 yr _____

9. $\$100$ at 10%, 2 yr: interest only _____

10. $\$200$ at 10%, 2 yr _____

11. $\$100$ at 5%, 1 yr _____

12. $\$400$ at 25%, 1 yr _____

13. $\$100$ at 10%, 3 yr _____

14. $\$1000$ at 100%, 1 yr _____

Word Problems

15. $\$1000$ grows at 10% for 2 years (yearly). Find the final amount. _____

16. $\$100$ grows at 10% for 2 years. How much interest is earned? _____

17. $\$500$ grows at 20% for 1 year. Find the amount. _____

18. $\$200$ grows at 50% for 1 year. Find the amount. _____

Answer Keys

1. $\$110$	**7.** $\$150$	**13.** $\$133.10$
2. $\$121$	**8.** $\$1100$	**14.** $\$2000$
3. $\$220$	**9.** $\$21$	**15.** $\$1210$
4. $\$120$	**10.** $\$242$	**16.** $\$21$
5. $\$200$	**11.** $\$105$	**17.** $\$600$
6. $\$550$	**12.** $\$500$	**18.** $\$300$

Step-by-Step Explanations

1. Start by naming the process: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $100(1.10) = \$110$. So the final answer is $\$110$.

2. A good way to think about this is: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $100(1.10)^2 = 100(1.21) = \$121$. So the final answer is $\$121$.

3. Step by step: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $200(1.10) = \$220$. So the final answer is $\$220$.

4. Take it one move at a time: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $100(1.20) = \$120$. So the final answer is $\$120$.

5. Start by naming the process: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $100(2.00) = \$200$. So the final answer is $\$200$.

6. A good way to think about this is: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $500(1.10) = \$550$. So the final answer is $\$550$.

7. Step by step: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $100(1.50) = \$150$. So the final answer is $\$150$.

8. Take it one move at a time: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $1000(1.10) = \$1100$. So the final answer is $\$1100$.

9. Start by naming the process: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $121 - 100 = \$21$. So the final answer is $\$21$.

10. A good way to think about this is: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $200(1.21) = \$242$. So the final answer is $\$242$.

11. Step by step: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $100(1.05) = \$105$. So the final answer is $\$105$.

12. Take it one move at a time: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $400(1.25) = \$500$. So the final answer is $\$500$.

13. Start by naming the process: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $100(1.10)^3 = 100(1.331) = \$133.10$. So the final answer is $\$133.10$.

14. A good way to think about this is: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $1000(2.00) = \$2000$. So the final answer is $\$2000$.

15. Step by step: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $1000(1.10)^2 = 1000(1.21) = \$1210$. So the final answer is $\$1210$.

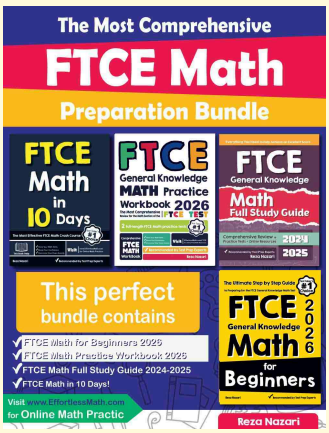
16. Take it one move at a time: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $121 - 100 = \$21$. So the final answer is $\$21$.

17. Start by naming the process: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $500(1.20) = \$600$. So the final answer is $\$600$.

18. A good way to think about this is: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $200(1.50) = \$300$. So the final answer is $\$300$.

Keep Building FTCE General Knowledge Math Skills

Recommended Effortless Math resources

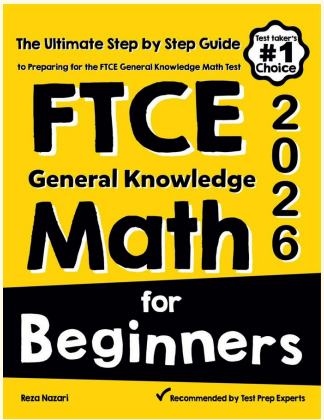


The Most Comprehensive FTCE Math Preparation Bundle

Scan Me

Download Instantly

STUDENT FAVORITE - FTCE General Knowledge Math for Beginners



FTCE General Knowledge Math for Beginners 2026

Step-by-step lessons, topic practice, and full review support for students who want a calm path through FTCE General Knowledge Math preparation.

A strong companion for self-study, tutoring, homework, and targeted review.

PDF Edition

Scan Me

Download Instantly