



BitWith Bite

MATHEMATICS WORKSHEET



Financial Mathematics

Chapter: Applied Mathematics · Level ★★★ · Time: 30 min

SCORE

___ / 20

Name _____ Class _____ Date _____

AFTER THIS WORKSHEET YOU CAN

- ✓ Compute future value with compound interest.
- ✓ Compute future value with simple interest.
- ✓ Compute present value (discounting).
- ✓ Understand the time value of money.



Section A · Concept Check

• BEGINNER

4 × 1 = 4

- 1 FV of \$2,000 at 4% compound for 3 years:
 - ☐ A. \$2,249.73
 - ☐ B. \$2,240
 - ☐ C. \$2,160
 - ☐ D. \$2,080
- 2 FV of \$2,000 at 4% simple for 3 years:
 - ☐ A. \$2,240
 - ☐ B. \$2,249.73
 - ☐ C. \$2,120
 - ☐ D. \$2,400
- 3 PV needed for \$5,000 in 4 years at 3% compound:
 - ☐ A. \$4,443.63
 - ☐ B. \$5,000
 - ☐ C. \$4,250
 - ☐ D. \$4,700
- 4 Over many years the faster growth comes from:
 - ☐ A. simple interest
 - ☐ B. compound interest
 - ☐ C. either equally
 - ☐ D. no interest



Section B · Problem Solving

• INTERMEDIATE

2 + 3 × 3 = 11

- 5 Compound FV = $P(1 + r)^t$ _____.
- 6 Simple interest grows _____ (a straight line).
- 7 Find FV of \$2,000 at 4% compound interest for 3 years.

- 8 Find FV of \$2,000 at 4% simple interest for 3 years.

- 9 Find the PV needed today to have \$5,000 in 4 years at 3% compound interest.



Section C · Challenge

• CHALLENGE

5

- 10 Which grows an investment faster over many years: simple or compound interest?

Reflection — the most useful thing I learned: _____

A ___/4 B ___/11 C ___/5 Total ___/20

Teacher's Signature _____

Parent's Signature _____

ANSWER KEY — FOLD OR CUT BEFORE HANDING OUT

1-A 2-A 3-A 4-B | 5 t 6 linearly 7 = \$2,249.73 8 = \$2,240 9 = \$4,443.63 | 10 = Compound interest

