



Name _____ Class _____ Date _____

AFTER THIS WORKSHEET YOU CAN

- ✓ Find terms of arithmetic and geometric sequences. ✓ Find the common difference or ratio.
✓ Use the nth-term idea. ✓ Distinguish the two sequence types.



Section A • Concept Check

• BEGINNER

$4 \times 1 = 4$

- 1 8th term of 4, 7, 10, 13, ... (arithmetic):
☐ A. 25 ☐ B. 24 ☐ C. 28 ☐ D. 22
- 2 Common difference of 20, 15, 10, 5, ...:
☐ A. -5 ☐ B. 5 ☐ C. -10 ☐ D. 15
- 3 5th term of 3, 9, 27, 81, ... (geometric):
☐ A. 243 ☐ B. 162 ☐ C. 324 ☐ D. 729
- 4 Common ratio of 8, 4, 2, 1, ...:
☐ A. 0.5 ☐ B. 2 ☐ C. -2 ☐ D. 4



Section B • Problem Solving

• INTERMEDIATE

$2 + 3 \times 3 = 11$

- 5 An arithmetic sequence has a constant _____
- 6 The common difference of 20, 15, 10, 5, ... is _____
- 7 Find the 8th term of 4, 7, 10, 13, ... (arithmetic).

- 8 Find the common difference of 20, 15, 10, 5, ...

- 9 Find the 5th term of 3, 9, 27, 81, ... (geometric).



Section C • Challenge

• CHALLENGE

5

- 10 Find the common ratio of 8, 4, 2, 1, ...

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-A | 5 difference 6 -5 7 = 25 8 = -5 9 = 243 | 10 = 0.5