BitWith Bite

MATHEMATICS WORKSHEET

# Systems of Equations

Chapter: Algebra I · Level ★★☆ · Time: 30 min

SCORE ___ / 20

Name _____ Class _____ Date _____

AFTER THIS WORKSHEET YOU CAN

✓ Solve systems by substitution and elimination. ✓ Interpret one, none, or infinite solutions.

✓ Check a solution in both equations. ✓ Recognise parallel and identical lines.

## Section A · Concept Check • BEGINNER 4 × 1 = 4

**1** Solve x + y = 15, x − y = 5:

◯ A. x=10, y=5 ◯ B. x=5, y=10 ◯ C. x=8, y=7 ◯ D. x=12, y=3

**2** Solve y = 4x, y = 2x + 10:

◯ A. x=5, y=20 ◯ B. x=10, y=40 ◯ C. x=2, y=8 ◯ D. x=5, y=10

**3** Solve 3x + y = 11, x − y = 1:

◯ A. x=3, y=2 ◯ B. x=2, y=5 ◯ C. x=4, y=−1 ◯ D. x=3, y=3

**4** Parallel lines with different intercepts give:

◯ A. one solution ◯ B. no solution ◯ C. infinite solutions ◯ D. two solutions

## Section B · Problem Solving • INTERMEDIATE 2 + 3×3 = 11

**5** The solution of a system satisfies _____ equations.

**6** Solving x + y = 15, x − y = 5 gives x = _____.

**7** Solve: x + y = 15, x − y = 5.

**8** Solve: y = 4x, y = 2x + 10.

**9** Solve: 3x + y = 11, x − y = 1.

## Section C · Challenge • CHALLENGE 5

**10** Solve: x + 2y = 8, x − y = 2.

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 both 6 10 7 = x = 10, y = 5 8 = x = 5, y = 20 9 = x = 3, y = 2 | 10 = x = 4, y = 2