8th Grade Systems of Equations: Substitution and Elimination

Common Core 8.EE.C.8b Time: 35 min Total: 17 marks Two-sided: questions continue on the back

G8SYS1

NAME or INITIALS (BLOCK CAPITALS, one letter per box)

ANSWER KEY — not for students, do not scan

ANSWERS — write each final answer in its box. Only these boxes are marked.

1	(7, 3)	2	(3, 6)	3	(3, 4)
4	(4, 3)	5	(4, 2)	6	(3, 2)
7	(2, 3)	8	15		

1 Solve the system. Write your answer as $(x,\ y)$. **1 mark**

$$x + y = 10$$
$$x - y = 4$$

(7, 3)

answer in box 1 on the front

3 Solve the system. Write your answer as $(x,\ y)$. **2 marks**

$$y = x + 1$$
$$2x + y = 10$$

(3, 4)

answer in box 3 on the front

2 Solve the system. Write your answer as $(x,\ y)$. **1 mark**

$$y = 2x$$
$$x + y = 9$$

(3, 6)

answer in box 2 on the front

4 Solve the system. Write your answer as $(x,\ y)$. **2 marks**

$$2x + y = 11$$
$$x - y = 1$$

(4, 3)

answer in box 4 on the front

Questions continue on the back. Only the answer boxes above are marked.

5 Solve the system. Write your answer as $(x,\ y)$. **2 marks**

$$3x + 2y = 16$$
$$x + 2y = 8$$

(4, 2)

answer in box 5 on the front

6 Solve the system. Write your answer as $(x,\ y)$. **3 marks**

$$2x + 3y = 12$$
$$4x - y = 10$$

(3, 2)

answer in box 6 on the front

7 Solve the system. Write your answer as $(x,\ y)$. **3 marks**

$$5x - 2y = 4$$
$$3x + 4y = 18$$

(2, 3)

answer in box 7 on the front

8 Student tickets cost \$5 and adult tickets cost \$8. 30 tickets were sold for \$195 in total. How many student tickets were sold? **3 marks**

15

answer in box 8 on the front