

Name: _____

TA: _____

Foundations of Math 10 LG 13 Ver B

/12

Expectation 1: solve systems of linear equations using the substitution method.

1. Solve this linear system of equations using the method of substitution. (2 marks)

$$\begin{aligned}2x - 7y &= 6 \\ x &= 4y - 1\end{aligned}$$

2. Solve this linear system of equations using the method of substitution. (2 marks)

$$\begin{aligned}5x - y &= 7 \\ 3x + 5y &= -7\end{aligned}$$

/4

Expectation 2: solve systems of linear equations using the elimination method.

3. Solve this system of equations using the elimination (addition/subtraction) method: (2 marks)

$$\begin{aligned}2x - 3y &= 1 \\4x + 3y &= 11\end{aligned}$$

4. Solve this system of equations using the elimination (addition/subtraction) method. (2 marks)

$$\begin{aligned}5x - 7y &= -2 \\4x + 2y &= 5\end{aligned}$$

Expectation 3: choose a strategy to solve a problem that involves a linear system.

5. The sum of two numbers is 66 and their difference is 18. What are the numbers? (2 marks)

6. The school band bought tickets for a concert. They paid \$290 for 6 tickets in Section A and 10 tickets in Section B. When the concert was repeated the next week, they paid \$220 for 4 tickets in Section A and 8 tickets in Section B.

Write and solve a system of equations to determine the cost of tickets in Section A and Section B. (2 marks)