MFM2P – Aly **Solving Systems of Equations Day 1 Review** Date:_____

1. Bell charges $0.10/min with no base fee. Rogers charges $0.05/min plus $10. Determine after how many minutes both phone companies cost the same.

2. A farm has 20 animals. Some are pigs and some are chickens. There are 46 legs in total. How many of each animal are there?

Practice on a separate sheet.

3. Identify the best method to solve, then solve using the best method.

a) $y = 4x + 6$
$y + 5x = -21$

b) $5y - 7x = 7$
$-5y + 3x = -3$

c) $-4x - 15y = -17$
$-x + 5y = -13$

d) $4x - 6y = 16$
$3x - 6y = 9$

e) $5x + 4y = -14$
$3x + 6y = 6$

f) $y = 6x - 11$
$-2x - 3y = -7$

4. A bike store sells tricycles and bicycles. They have 32 bikes and there are 79 bike wheels. How many tricycles and how many bicycles does the store have?

5. South Carleton HS spent $4232 on math and English books. Math books cost $78 each and English books cost $62 each. If they bought 60 books in total how many of each type were bought?

<u>BONUS</u>

6. At Mrs. Aly's gym, there's a $90 membership fee and a $4/class rate. At Ms. McAllister's gym, there's a $10 membership fee, but it costs $12/class. Whose gym is a better deal? Find the PoI to help decide.

7. Identify the best method to solve, then solve using the best method.

a) $x - y = 5$
$3x - 5y = 5$

b) $y = -5x - 17$
$-3x - 3y = 3$

c) $y = 5x - 3$
$3x - 8y = 24$

d) $-4x - 2y = 14$
$-10x + 7y = -25$

Answers:
1. 200mins, both cost $20 2. 3 pigs, 17 chickens
3.a) Sub (-3, -6) b) Elim (-1, 0) c) Elim (8, -1) d) Elim (7, 2) e) Elim (-6, 4) f) Sub (2, 1)
4. 15 tricycles, 17 bicycles 5. 32 math books, 28 english books
6. 10 classes, $130 7. a) Elim (10, 5) b) Sub (-4, 3) c) Sub (0, -3) d) Elim (-1, -5)