

Name:

Date:

*Is skilled at solving a system of linear equations through substitution or elimination. **Worksheet M***

Shing went to play miniature golf on Monday, when it cost \$16 to rent the club and ball, plus \$2 per game. Tracy went Thursday, paying \$3 per game, plus rental fees of \$2. By coincidence, they played the same number of games for the same total cost. How much did each one spend? How many games did each one play?

1) Write the system of linear equations, then solve it.

2) They each spent \_\_\_\_\_ and they each played \_\_\_\_\_ games.

Professor Herman is grading papers in the teachers' lounge. He has already finished grading 12 assignments, and is grading 4 more assignments per hour. His teaching assistant just came in to help him. He can grade at a rate of 8 assignments every hour. At some point, they will be finished and will have graded the same number of papers. How many assignments will they each have graded? How long will that take?

1) Write the system of linear equations, then solve it.

2) They each graded \_\_\_\_\_ assignments and it took them \_\_\_\_\_ hours.

Two kids at a summer camp, Wilfred and Anna, are competing in a potato sack race. Wilfred is younger, so he is given a head start of 7 meters. When the race starts, Wilfred hops at a rate of 2 meters per second, and Anna hops 3 meters per second. Eventually, Anna will overtake Wilfred. How long will that take? How far will Anna have to hop?

1) Write the system of linear equations.

2) It will take them \_\_\_\_\_ and they will have to hop \_\_\_\_\_.

Wilson and his little sister are saving up money to buy a joint birthday present for their mother. Wilson already has \$9 saved and plans to save \$17 per week from his allowance. His sister has \$7 saved so far and will save \$19 per week from hers. The two siblings will soon have saved the same amount towards their mother's gift. How long will that take? How much will each one have saved?

1) Write the system of linear equations, then solve it.

2) It will take them \_\_\_\_\_ to save up \_\_\_\_\_.

A rental car company is running two specials. Customers can pay \$43 to rent a compact car for the first day plus \$4 for each additional day, or they can rent the same car for \$34 the first day and \$13 for every additional day beyond that. Jessica notices that, given the number of additional days she wants to rent the car for, the two specials are equivalent. How many additional days does Jessica want? How much would Jessica pay in total?

1) Write the system of linear equations.

2) On the \_\_\_\_\_ day the cost will be \_\_\_\_\_.