

8

NAME _____ DATE _____

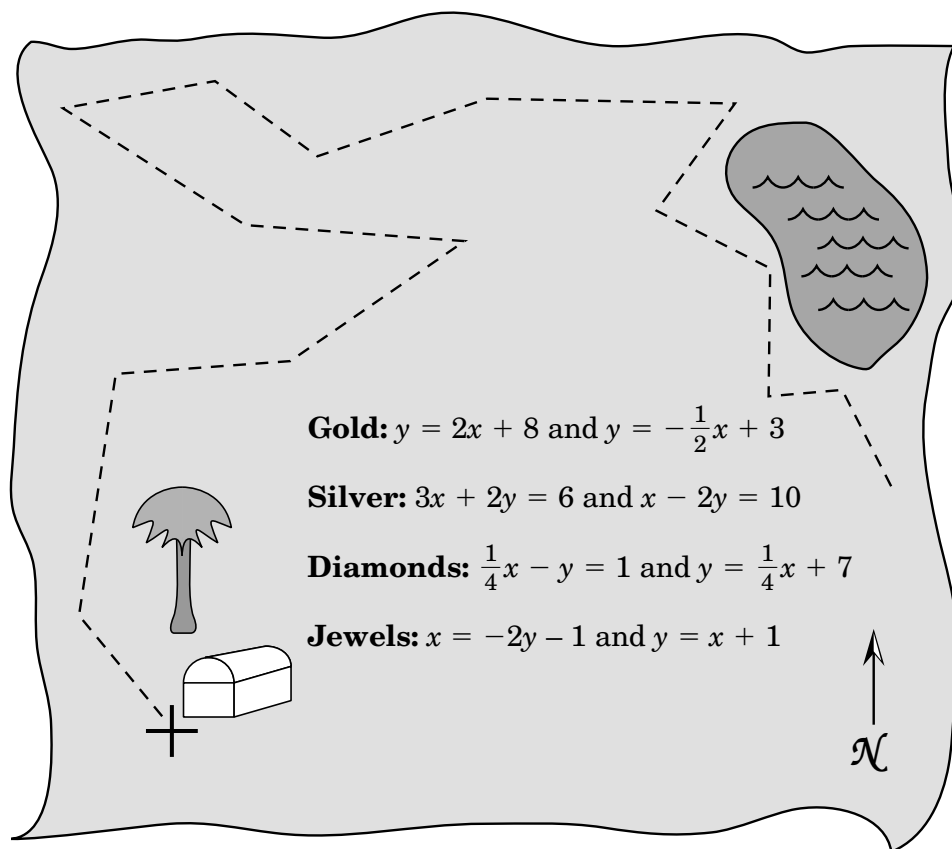
Chapter 8 Review

Treasure Hunt

Imagine that you and your parent are on a treasure hunt. The treasure hunt is taking place on a giant coordinate grid that is laid out on the floor of your school gym. You are competing with other parents and students for a grand prize. However, every parent/student team is looking for different treasures.

The treasures for which you are searching are numbered stickers on the floor of this giant coordinate grid. Specifically, you are given a list of four items and a starting point. To locate the treasures, you must plot the intersection of the two graphs listed for each treasure.

Your starting point is the intersection of the graphs of $y = \frac{2}{3}x + 5$ and $2y = x + 10$. Find the coordinates of your starting point by graphing the two equations. Determine the coordinates for the location of each treasure by graphing each pair of equations given in the figure below. Then determine which treasure is closest to your starting point. The winner of the treasure hunt is the first parent/student team who turns in the treasure sticker that was closest to their starting point.



Answers are located on page 112.