

Algebra 2/Trig-H
1.5, 1.6

HW# _____ Name _____

Date _____ Period _____ Column _____

Define a variable. Write and solve an equation or inequality for each problem. Give the solution to each problem in a complete sentence.

1. At 3 p.m., a plane leaves London to fly to Madrid, 1260 km away. At 4 pm, a second plane leaves Madrid to fly to London. The second plane flies 40 km/hr faster than the first. If the planes pass each other at 4:30 p.m., what is the speed of each plane?

2. A landscaper has 480 feet of fence to enclose a rectangular garden. The length of the garden must be 15 feet shorter than twice the width. Find the dimensions of the garden, assuming that all 480 feet of fence will be used.

3. Find three consecutive multiples of 4 with a sum of 276.

4. Thirty-nine more than three-fifths of a number is greater than 53. Find the smallest possible integer value for the number.

5. Mia has twice as many nickels as quarters and three more dimes than nickels. If the value of the coins is more than \$5, at least how many dimes does she have?

6. The measure of the supplement of an angle is six less than three times the complement of the angle. Find the measure of the angle.

7. Find all possible sets of four consecutive integers, such that their sum is between 177 and 185.

8. ASB ordered Activities Calendars and sold all but 40 of them. The printing cost per calendar was \$2, and ASB sold them for \$4. The total profit was \$2440. How many calendars were ordered?