

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

1. At 3 pm, a plane leaves London to fly to Madrid, 1260 km away. At 4 pm, a 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 pm, what is the speed of each plane?

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

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

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

5. Mia's bank contains twice as many nickels as quarters and 3 more dimes than nickels. If the coins are worth more than \$5, at least how many dimes does she have?

6. The measure of the supplement of an angle is 6 less than 3 times the complement of the angle. Find the measure of the angle.

7. Find all possible sets of 4 consecutive integers, such that the sum of the 4 integers is between 177 and 185.

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