EXTRA PRACTICE — Exercises

Unit V – First Degree Relations with Two Placeholders
Part D – Problem Solving Using Two Placeholders
Lesson 2 – "Consecutive Integer" Problems

For each of the following story problems, answer the four analysis questions to find the system of equations needed to solve. Then solve and use common sense to check your answers.

1. Find two consecutive integers whose product is 1722.

2. If the product of two consecutive integers is decreased by 20 times the greater integer, the result is 442. Find the integers.

3. FInd three consecutive even integers such that the product of the first two integers is 48.

4. Find three consecutive integers so that the square of the first, increased by the square of the third, is 74.

5. If the product of two consecutive odd integers is decreased by one-third the lesser integer, the result is 250. Find the integers.

EXTRA PRACTICE — Answer Key

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For each of the following story problems, answer the four analysis questions to find the system of equations needed to solve. Then solve and use common sense to check your answers.

1. The numbers could be $^{-}42$ and $^{-}41$ or 41 and 42.

2. The numbers could be 33 and 34 or $^{-}14$ and $^{-}13$

3. The number could be $^{-}8$, $^{-}6$ and $^{-}4$ or 6, 8, and 10

4. The numbers could $^{-}7$, $^{-}6$, and $^{-}5$ or 5, 6, and 7

5. The numbers are 15 and 17.