

Show a complete solution for each problem.

1. The sum of three consecutive integers is 105. Find the integers.

$$\begin{array}{l}
 x = \text{first integer} \\
 x + 1 = \text{second integer} \\
 x + 2 = \text{third integer}
 \end{array}
 \qquad
 \begin{array}{l}
 x + (x + 1) + (x + 2) = 105 \\
 3x + 3 = 105 \\
 3x = 102 \\
 x = 34
 \end{array}
 \qquad
 \begin{array}{l}
 x + 1 = 35 \\
 x + 2 = 36
 \end{array}$$

2. The sum of three consecutive integers is -129 . Find the integers.
3. The sum of four consecutive integers is -334 . Find the integers.
4. The sum of four consecutive integers is 262. Find the integers.
5. The sum of three consecutive integers is 33 more than the least of the integers. Find the integers.
6. The sum of three consecutive integers is 47 less than the least of the integers. Find the integers.
7. The sum of three consecutive even integers is 138. Find the integers.
8. The sum of three consecutive even integers is -312 . Find the integers.
9. The sum of three consecutive odd integers is -219 . Find the integers.
10. The sum of three consecutive odd integers is 285. Find the integers.
11. The sum of four consecutive even integers is the same as the least of the integers. Find the integers.
12. The sum of four consecutive odd integers is 0. Find the integers.

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1. The sum of three consecutive integers is 138. Find the integers.
 $x = \text{first integer}$ $x + (x+1) + (x+2) = 138$
 $x+1 = \text{second integer}$ $3x + 3 = 138$
 $x+2 = \text{third integer}$ $3x = 135$
 $x = 45$ $x+1 = 46$ $x+2 = 47$
2. The sum of three consecutive integers is -114 . Find the integers.
3. The sum of four consecutive integers is -294 . Find the integers.
4. The sum of four consecutive integers is 238. Find the integers.
5. The sum of three consecutive integers is 53 more than the least of the integers. Find the integers.
6. The sum of three consecutive integers is 71 less than the least of the integers. Find the integers.
7. The sum of three consecutive even integers is 210. Find the integers.
8. The sum of three consecutive even integers is -360 . Find the integers.
9. The sum of three consecutive odd integers is 111. Find the integers.
10. The sum of three consecutive odd integers is -75 . Find the integers.
11. The sum of four consecutive even integers equals seven times the greatest of the integers. Find the integers.
12. The sum of four consecutive odd integers is three more than five times the least of the integers. Find the integers.