

Name \_\_\_\_\_

Date \_\_\_\_\_

### Consecutive Integer Problems - Step-by-Step Lesson

Find three consecutive even integers whose sum is 42.



#### Explanation:

Let  $x$  be the first of these three consecutive even integers. Then the second is  $x+2$ , while the third one is  $x+4$ .

Since, the sum of these three consecutive even integers  $x$ ,  $x+2$ ,  $x+4$  is equal to 42, we can write the equation.

$$x + (x+2) + (x+4) = 42$$

$$3x + 6 = 42$$

$$3x = 42 - 6$$

$$X = \frac{36}{3}$$

$$X = 12$$

The first even integer number is 12.

The second number is  $12+2 = 14$ , and third is  $x+4 = 16$ .

So, the answer is 12, 14, 16.

