## MathFLIX CHALLENGE

October 4, 2007

## Consecutive Number Patterns

Study the consecutive numbers below to calculate the sums. Can you discover any patterns?

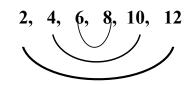
**Easy** 

Sum

<b>Consecutive Odd Numbers</b>	Sum
1, 3	
5, 7, 9	
11, 13, 15, 17	

<b>Consecutive Even Numbers</b>	Sum
2, 4	
6, 8, 10	
12, 14, 16, 18	

Check out this short cut for adding consecutive numbers.



$$2 + 12 = 14$$
  
 $4 + 10 = 14$   
 $6 + 8 = 14$   
 $42$ 

$$\begin{array}{r}
 1 + 5 = 6 \\
 2 + 4 = 6 \\
 \hline
 + 3 \\
 \hline
 15
 \end{array}$$

Challenging

## What two consecutive numbers equal 51? What three consecutive numbers equal 36? What four consecutive numbers equal 22? What five consecutive numbers equal 60? What six consecutive numbers equal 99?

**Consecutive Even Numbers** 

What two consecutive even numbers equal 22?

What three consecutive even numbers equal 66?

What four consecutive even numbers equal 300?