

# COUNTDOWN Challenge

October 4, 2007

## Consecutive Number Patterns

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

### Easy

Consecutive Numbers	Sum
5, 6	_____
5, 6, 7,	_____
5, 6, 7, 8,	_____
5, 6, 7, 8, 9,	_____
5, 6, 7, 8, 9, 10	_____

Consecutive Odd Numbers	Sum
1, 3	_____
5, 7, 9	_____
11, 13, 15, 17	_____

Consecutive Even Numbers	Sum
2, 4	_____
6, 8, 10	_____
12, 14, 16, 18	_____

### Challenging

#### Consecutive Numbers

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 Odd Numbers

What two consecutive odd numbers equal 8?  
\_\_\_\_\_

What three consecutive odd numbers equal 27?  
\_\_\_\_\_

What four consecutive odd numbers equal 96?  
\_\_\_\_\_

Check out this short cut for adding consecutive numbers.

2, 4, 6, 8, 10, 12

$$\begin{array}{r} 2 + 12 = 14 \\ 4 + 10 = 14 \\ 6 + 8 = \underline{+14} \\ \hline 42 \end{array}$$

1, 2, 3, 4, 5

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

#### Consecutive Even Numbers

What two consecutive even numbers equal 22?  
\_\_\_\_\_

What three consecutive even numbers equal 66?  
\_\_\_\_\_

What four consecutive even numbers equal 300?  
\_\_\_\_\_