

Odds and Evens

Whole numbers can be divided into even and odd numbers. Any whole number that can be divided exactly (with no remainder) by two is called an **even** number. Zero is considered to be an even number. If a whole number cannot be divided exactly by two, then it is called an **odd** number.

a) Which of the following numbers are even?

5, 9, 18, 45, 89, 248, 38, 7 265, 1 234 987, 0, 23.8, 23

b) Write down all of the one digit even numbers.

c) Tell whether each of the following expressions result in an odd or an even number.

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| i) the sum of 2 even numbers | xiii) an even number multiplied by itself |
| ii) the sum of 3 odd numbers | xiv) an even number raised to an odd exponent |
| iii) the sum of 2 even and 1 odd number | xv) an odd number raised to an even exponent |
| iv) the sum of an even number of odd numbers | xvi) an even number added to 1 |
| v) the sum of an odd number of even numbers | xvii) an odd number added to 1 |
| vi) the sum of an odd number of odd numbers | xviii) an odd number added to 2 |
| vii) the difference between two odd numbers | xix) an even number added to 2 |
| viii) the difference between two even numbers | xx) the sum of 3 consecutive numbers starting with an odd number |
| ix) the difference between an odd and an even number | xxi) the sum of 3 consecutive numbers starting with an even number |
| x) the product of two even numbers | xxii) the sum of 4 consecutive numbers |
| xi) the product of two odd numbers | xxiii) the sum of an even number of consecutive numbers |
| xii) the product of an even and an odd number | xxiv) the sum of an odd number of consecutive number |

d) If you divide an even number by an odd number and get a whole number for a quotient, is the quotient odd or even?