#### **GRADE 4**

## UNIT 1

# Lesson 1

## **Numbers**

In this lesson you will learn about the various types of numbers. Numbers are placed into groups based on how they are alike. In this lesson you will learn about odd and even numbers, square numbers, and multiples of numbers.

#### **Odd Numbers**

A number is odd if there is a remainder when it is divided into two equal groups. The first ten odd numbers are 1, 3, 5, 7, 9, 11, 13, 15, 17, and 19. All these numbers have one thing in common. They have a remainder when they are divided into two equal groups.

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For example, when the thirteen circles above are divided into two equal groups there are two groups of six with one extra. This tells us that 13 is an odd number.

#### **Even Numbers**

An even number is any number that can be divided into two equal groups. The first ten even numbers are 2, 4, 6, 8, 10, 12, 14, 16, 18, and 20. For example the eight yellow cubes below are divided into two equal groups of four with no remainder. Therefore 8 is an even number.



### **Independent Work**

(1) Which is an odd number?

- (A)32
- (B) 45
- (C) 50
- (D) 54
- (2) Which is an odd number?
  - (A)76
  - (B) 60
  - (C) 27
  - (D) 52
- (3) Which is an odd number?
  - (A)83
  - (B) 24
  - (C) 74
  - (D)70
- (4) Which is an even number?
  - (A)45
  - (B) 55
  - (C) 40
  - (D)21
- (5) Which is an even number?
  - (A)65
  - (B) 77
  - (C) 47

(D)48

- (6) Which is an even number?
  - (A)21
  - (B) 36
  - (C) 87
  - (D) 63

Ans.: (1) B; (2) C; (3) A; (4) C; (5) D; (6) B.

### **Square Numbers**

A square number represents a set of items which can be arranged in a square. For

example, the four hearts below are arranged as a square. This is a 2 by 2 square. We may also



have a 3 by 3 square. That means that we have arranged nine things in a square.



From this we can see that both 4 and 9 are square numbers. Some other square numbers are 16,

25, and 36.

## **Independent Work**

(1) Which is a square number?

(A)55

- **(B)** 44
- (C) 8

(D)16

- (2) Which is a square number?
  - (A)40
  - (B) 49
  - (C) 63
  - (D)12
- (3) Which is a square number?
  - (A)24
  - (B) 10
  - (C) 81
  - (D) 50
- (4) Six students are placed in a row. How many rows of six students must there be to

form a square?

- (A)2
- **(B)**4
- (C) 6
- (D)8
- (5) In the problem above how, many <u>total</u> students must there be to form a square of six students in a row.
  - (A) 12 (B) 36
  - (C) 48
  - (D)64

- (6) If two students are added to the row in the above problem how many students would be needed to form a square?(A) 32
  - (B) 16
  - (C) 48
  - (D)64

Ans.: (1) D; (2) B: (3) C; (4) C; (5) B; (6) D.

#### **Multiples of Numbers**

When you do what is sometimes called skip counting you are using multiples. If you count 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, then you are counting using the multiples of two. When you count 5, 10, 15, 20, 25, 30, you are counting using the multiples of 5. Here are some examples of multiples.

Multiples of 2 are: 2, 4, 6, 8, 10, 12.

Multiples of 3 are: 3, 6, 9, 12, 15, 18

Multiples of 4 are: 4, 8 12, 16, 20, 24.

Multiples of 5 are: 5, 10, 15, 20, 25, 30.

Multiples of 6 are: 6, 12, 18, 24, 30, 36.

#### **Independent Work**

- (1) Which is a multiple of 3?
  - (A)23
  - (B) 33
  - (C) 43

(D) 53

(2) Which is a multiple of 6?

(A)16

(B) 26

- (C) 46
- (D)36

(3) Which is a multiple of 7?

(A)16

- **(B)** 17
- (C) 21
- (D)25

(4) Hamburger buns are sold in packs of eight. Which could be the total number of

hamburger buns bought by Marla?

- (A)56
- (B) 38
- (C) 26
- (D)62

(5) Tony is counting his baseball cards. He places them in rows of six with no remainder.

Which is most likely the number of baseball cards Tony has?

- (A)16
- (B) 33
- (C) 36
- (D) 39

- (6) Fiona places her blocks in equal stacks of seven. Which is most probably the total number of blocks she has?
  - (A)25
  - (B) 28
  - (C) 34
  - (D)37

Ans.: (1) B; (2) D; (3) C; (4) A; (5) C; (6) B.

# Lesson 1 Quiz

- (1) Which is an odd number?
  - (A)30
  - (B) 42
  - (C) 58
  - (D)61
- (2) Which is an odd number?
  - (A)32
  - (B) 43
  - (C) 56
  - (D)70
- (3) Which is an even number?
  - (A)43
  - (B) 47

(C) 50

- (D) 53
- (4) Which is an even number?
  - (A)17
  - (B) 22
  - (C) 25
  - (D)31
- (5) Which is a square number?
  - (A)22
  - (B) 33
  - (C) 64
  - (D)44
- (6) Which is a square number?
  - (A)11
  - (B) 25
  - (C) 55
  - (D)60
- (7) Which number is a multiple of 4?
  - (A)35
  - (B) 42
  - (C) 46
  - (D) 52

- (8) A group of people are seated 8 in a row. How many such rows must there be to make a square?
  - (A)8
  - **(B)**4
  - (C) 16
  - (D)32
- (9) A certain number of candies are divided equally between two friends. Which could be the total number of candies?
  - (A)22
  - (B) 15
  - (C) 25
  - (D)35
- (10) Sara is counting some buttons. After putting them in groups of four there are no buttons left over. Which is most likely the total number of buttons Sara had?
  - (A)14
  - (B) 18
  - (C) 24
  - (D)30

Ans.: (1) D; (2) B; (3) C; (4) B; (5) C; (6) B; (7) D; (8) A; (9) A; (10) C.