# DECIMAL NUMBERS

## A DEFINITION

### A.1 IDENTIFYING PLACE VALUES
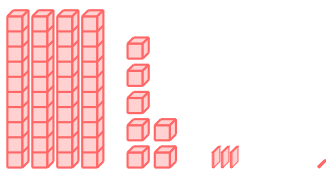
**Ex 1:**
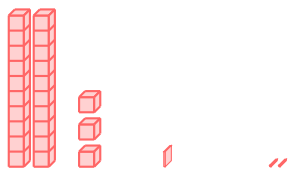
The number of cubes is:

| Tens | Ones | . | Tenths | Hundredths |
|------|------|---|--------|------------|
|      |      | . |        |            |

**Ex 2:**

The number of cubes is

| Tens | Ones | . | Tenths | Hundredths |
|------|------|---|--------|------------|
|      |      | . |        |            |

**Ex 3:**

The number of cubes is

| Tens | Ones | . | Tenths | Hundredths |
|------|------|---|--------|------------|
|      |      | . |        |            |

**Ex 4:**
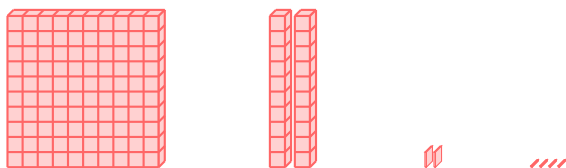
The number of cubes is

| Hundreds | Tens | Ones | . | Tenths | Hundredths |
|----------|------|------|---|--------|------------|
|          |      |      | . |        |            |

**Ex 5:**
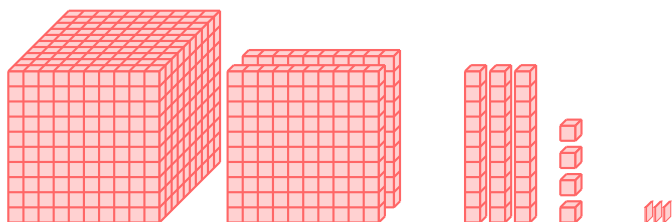
The number of cubes is

| Thousands | Hundreds | Tens | Ones | . | Tenths |
|-----------|----------|------|------|---|--------|
|           |          |      |      | . |        |

## A.2 WRITING DECIMAL NUMBERS

**Ex 6:**

| Tens | Ones | . | Tenths | Hundredths |
|------|------|---|--------|------------|
| 2    | 3    | . | 1      | 2          |

The decimal number is [    ].

**Ex 7:**

| Tens | Ones | . | Tenths | Hundredths |
|------|------|---|--------|------------|
| 2    | 0    | . | 0      | 1          |

The decimal number is [    ].

**Ex 8:**

| Hundreds | Tens | Ones | . | Tenths | Hundredths |
|----------|------|------|---|--------|------------|
| 1        | 2    | 0    | . | 9      | 9          |

The decimal number is [    ].

**Ex 9:**

| Tens | Ones | . | Tenths | Hundredths |
|------|------|---|--------|------------|
| 2    | 3    | . | 1      | 0          |

The decimal number is [    ].

**Ex 10:**

| Hundreds | Tens | Ones | . | Tenths | Hundredths |
|----------|------|------|---|--------|------------|
| 9        | 1    | 1    | . | 0      | 1          |

The decimal number is [    ].

## A.3 FINDING THE DIGIT IN A PLACE VALUE

**Ex 11:** The digit in the hundredths place of 43.21 is [    ].

**Ex 12:** The digit in the tens place of 900.01 is [    ].

**Ex 13:** The digit in the tenths place of 10.04 is [    ].

**Ex 14:** The digit in the hundredths place of 0.89 is [    ].

## A.4 WRITING DECIMAL NUMBERS FROM FRACTIONS IN BASE 10

**Ex 15:** Write in decimal form:

$$\frac{3}{10} = \boxed{\phantom{xxx}}$$

**Ex 16:** Write in decimal form:

$$\frac{3}{100} = \boxed{\phantom{xxx}}$$

**Ex 17:** Write in decimal form:

$$\frac{5}{100} = \boxed{\phantom{xxx}}$$

**Ex 18:** Write in decimal form:

$$\frac{8}{10} = \boxed{\phantom{xxx}}$$

## A.5 WRITING DECIMAL NUMBERS FROM EXPANDED FORMS

**Ex 19:** $4 \text{ tens} + 1 \text{ one} + 2 \text{ tenths} + 5 \text{ hundredths} =$ ⬚

**Ex 20:** $2 \text{ tens} + 3 \text{ ones} + 5 \text{ tenths} + 1 \text{ hundredths} =$ ⬚

**Ex 21:** $2 \text{ tens} + 5 \text{ hundredths} =$ ⬚

**Ex 22:** $1 \text{ hundredth} =$ ⬚

## A.6 WRITING DECIMAL NUMBERS FROM EXPANDED FORMS II

**Ex 23:**
$$2 + 4 \times \frac{1}{10} + 1 \times \frac{1}{100} = \boxed{\phantom{xxxxx}}$$

**Ex 24:**
$$3 \times 10 + 1 + 2 \times \frac{1}{10} + 3 \times \frac{1}{100} = \boxed{\phantom{xxxxx}}$$

**Ex 25:**
$$1 + 3 \times \frac{1}{100} = \boxed{\phantom{xxxxx}}$$

**Ex 26:**
$$9 + 9 \times \frac{1}{10} + 9 \times \frac{1}{100} = \boxed{\phantom{xxxxx}}$$
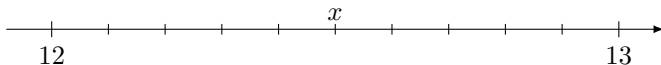
# B ON THE NUMBER LINE

## B.1 IDENTIFYING DECIMAL NUMBERS ON A NUMBER LINE

**Ex 27:** Find the value of $x$
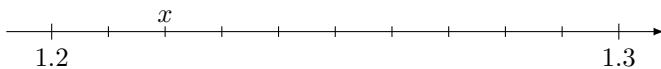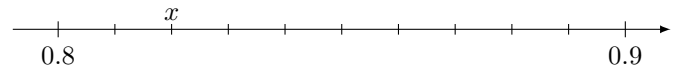


$x =$ ⬚

**Ex 28:** Find the value of $x$
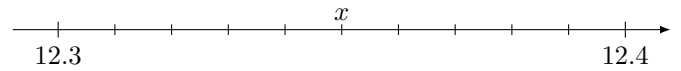


$x =$ ⬚

**Ex 29:** Find the value of $x$
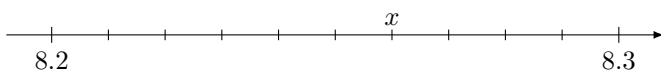


$x =$ ⬚

**Ex 30:** Find the value of $x$



$x =$ ⬚

**Ex 31:** Find the value of $x$



$x =$ ⬚

**Ex 32:** Find the value of $x$



$x =$ ⬚