## Rounding \& Standard Form

## Things you need to learn to do

- Roudning to a given number of decimal places.
- Rounding to a given number of significant figures.
- Converting numbers to standard form.


## Rounding

Given any number there are two predominant ways of rounding it:

## Rounding

Given any number there are two predominant ways of rounding it:

- using a specific number of decimal places (d.p.),


## Rounding

Given any number there are two predominant ways of rounding it:

- using a specific number of decimal places (d.p.),
- using a specific number of significant figures (s.f.)


## Rounding - decimal places

When rounding to decimal places we round to a certain position after the decimal point.

## Rounding - decimal places

When rounding to decimal places we round to a certain position after the decimal point. Let's take the number 6546.54654 as an example. We will round it to:

## Rounding - decimal places

When rounding to decimal places we round to a certain position after the decimal point. Let's take the number 6546.54654 as an example. We will round it to:

1 d.p.: 6546.5

## Rounding - decimal places

When rounding to decimal places we round to a certain position after the decimal point. Let's take the number 6546.54654 as an example. We will round it to:

1 d.p.: 6546.5
2 d.p.: 6546.55

## Rounding - decimal places

When rounding to decimal places we round to a certain position after the decimal point. Let's take the number 6546.54654 as an example. We will round it to:

1 d.p.: 6546.5
2 d.p.: 6546.55
3 d.p.: 6546.547

## Rounding - decimal places

When rounding to decimal places we round to a certain position after the decimal point. Let's take the number 6546.54654 as an example. We will round it to:

1 d.p.: 6546.5
2 d.p.: 6546.55
3 d.p.: 6546.547
4 d.p.: 6546.5465

## Rounding - decimal places

When rounding to decimal places we round to a certain position after the decimal point. Let's take the number 6546.54654 as an example. We will round it to:

1 d.p.: 6546.5
2 d.p.: 6546.55
3 d.p.: 6546.547
4 d.p.: 6546.5465
Note that we can also round this number to:
the nearest unit: 6547

## Rounding - decimal places

When rounding to decimal places we round to a certain position after the decimal point. Let's take the number 6546.54654 as an example. We will round it to:

1 d.p.: 6546.5
2 d.p.: 6546.55
3 d.p.: 6546.547
4 d.p.: 6546.5465
Note that we can also round this number to:
the nearest unit: 6547
the nearest ten: 6550

## Rounding - decimal places

When rounding to decimal places we round to a certain position after the decimal point. Let's take the number 6546.54654 as an example. We will round it to:

1 d.p.: 6546.5
2 d.p.: 6546.55
3 d.p.: 6546.547
4 d.p.: 6546.5465
Note that we can also round this number to:
the nearest unit: 6547
the nearest ten: 6550
the nearest hundred: 6500

## Rounding - decimal places

When rounding to decimal places we round to a certain position after the decimal point. Let's take the number 6546.54654 as an example. We will round it to:

1 d.p.: 6546.5
2 d.p.: 6546.55
3 d.p.: 6546.547
4 d.p.: 6546.5465
Note that we can also round this number to:
the nearest unit: 6547
the nearest ten: 6550
the nearest hundred: 6500
the nearest thousand: 7000

## Rounding - decimal places - exercises

Round the given given number accordingly:

## Rounding - decimal places - exercises

Round the given given number accordingly:
a) 25.519

## Rounding - decimal places - exercises

Round the given given number accordingly:
a) 25.519
i. 1 d.p.:

## Rounding - decimal places - exercises

Round the given given number accordingly:
a) 25.519
i. 1 d.p.: 25.5

## Rounding - decimal places - exercises

Round the given given number accordingly:
a) 25.519
i. 1 d.p.: 25.5
ii. nearest unit:

## Rounding - decimal places - exercises

Round the given given number accordingly:
a) 25.519
i. 1 d.p.: 25.5
ii. nearest unit: 26

## Rounding - decimal places - exercises

Round the given given number accordingly:
a) 25.519
i. 1 d.p.: 25.5
ii. nearest unit: 26
iii. 2 d.p.:

## Rounding - decimal places - exercises

Round the given given number accordingly:
a) 25.519
i. 1 d.p.: 25.5
ii. nearest unit: 26
iii. 2 d.p.: 25.52

## Rounding - decimal places - exercises

Round the given given number accordingly:
a) 25.519
i. 1 d.p.: 25.5
ii. nearest unit: 26
iii. 2 d.p.: 25.52
b) 321.0990

## Rounding - decimal places - exercises

Round the given given number accordingly:
a) 25.519
i. 1 d.p.: 25.5
ii. nearest unit: 26
iii. 2 d.p.: 25.52
b) 321.0990
i. 3 d.p.:

## Rounding - decimal places - exercises

Round the given given number accordingly:
a) 25.519
i. 1 d.p.: 25.5
ii. nearest unit: 26
iii. 2 d.p.: 25.52
b) 321.0990
i. 3 d.p.: 321.099

## Rounding - decimal places - exercises

Round the given given number accordingly:
a) 25.519
i. 1 d.p.: 25.5
ii. nearest unit: 26
iii. 2 d.p.: 25.52
b) 321.0990
i. 3 d.p.: 321.099
ii. nearest hundred:

## Rounding - decimal places - exercises

Round the given given number accordingly:
a) 25.519
i. 1 d.p.: 25.5
ii. nearest unit: 26
iii. 2 d.p.: 25.52
b) 321.0990
i. 3 d.p.: 321.099
ii. nearest hundred: 300

## Rounding - decimal places - exercises

Round the given given number accordingly:
a) 25.519
i. 1 d.p.: 25.5
ii. nearest unit: 26
iii. 2 d.p.: 25.52
b) 321.0990
i. 3 d.p.: 321.099
ii. nearest hundred: 300
iii. 2 d.p.:

## Rounding - decimal places - exercises

Round the given given number accordingly:
a) 25.519
i. 1 d.p.: 25.5
ii. nearest unit: 26
iii. 2 d.p.: 25.52
b) 321.0990
i. 3 d.p.: 321.099
ii. nearest hundred: 300
iii. 2 d.p.: 321.10

## Rounding - decimal places - exercises

Round the given given number accordingly:
a) 25.519
i. 1 d.p.: 25.5
ii. nearest unit: 26
iii. 2 d.p.: 25.52
b) 321.0990
i. 3 d.p.: 321.099
ii. nearest hundred: 300
iii. 2 d.p.: 321.10
c) 54001.1

## Rounding - decimal places - exercises

Round the given given number accordingly:
a) 25.519
i. 1 d.p.: 25.5
ii. nearest unit: 26
iii. 2 d.p.: 25.52
b) 321.0990
i. 3 d.p.: 321.099
ii. nearest hundred: 300
iii. 2 d.p.: 321.10
c) 54001.1
i. nearest hundred:

## Rounding - decimal places - exercises

Round the given given number accordingly:
a) 25.519
i. 1 d.p.: 25.5
ii. nearest unit: 26
iii. 2 d.p.: 25.52
b) 321.0990
i. 3 d.p.: 321.099
ii. nearest hundred: 300
iii. 2 d.p.: 321.10
c) 54001.1
i. nearest hundred: 54000

## Rounding - decimal places - exercises

Round the given given number accordingly:
a) 25.519
i. 1 d.p.: 25.5
ii. nearest unit: 26
iii. 2 d.p.: 25.52
b) 321.0990
i. 3 d.p.: 321.099
ii. nearest hundred: 300
iii. 2 d.p.: 321.10
c) 54001.1
i. nearest hundred: 54000
ii. nearest ten:

## Rounding - decimal places - exercises

Round the given given number accordingly:
a) 25.519
i. 1 d.p.: 25.5
ii. nearest unit: 26
iii. 2 d.p.: 25.52
b) 321.0990
i. 3 d.p.: 321.099
ii. nearest hundred: 300
iii. 2 d.p.: 321.10
c) 54001.1
i. nearest hundred: 54000
ii. nearest ten: 54000

## Rounding - decimal places - exercises

Round the given given number accordingly:
a) 25.519
i. 1 d.p.: 25.5
ii. nearest unit: 26
iii. 2 d.p.: 25.52
b) 321.0990
i. 3 d.p.: 321.099
ii. nearest hundred: 300
iii. 2 d.p.: 321.10
c) 54001.1
i. nearest hundred: 54000
ii. nearest ten: 54000
iii. 2 d.p.:

## Rounding - decimal places - exercises

Round the given given number accordingly:
a) 25.519
i. 1 d.p.: 25.5
ii. nearest unit: 26
iii. 2 d.p.: 25.52
b) 321.0990
i. 3 d.p.: 321.099
ii. nearest hundred: 300
iii. 2 d.p.: 321.10
c) 54001.1
i. nearest hundred: 54000
ii. nearest ten: 54000
iii. 2 d.p.: 54001.10

## Rounding - decimal places - exercises

Round the given given number accordingly:
a) 25.519
i. 1 d.p.: 25.5
ii. nearest unit: 26
iii. 2 d.p.: 25.52
b) 321.0990
i. 3 d.p.: 321.099
ii. nearest hundred: 300
iii. 2 d.p.: 321.10
c) 54001.1
i. nearest hundred: 54000
ii. nearest ten: 54000
iii. 2 d.p.: 54001.10

## Rounding - decimal places

It is very important to realize the difference between the following numbers 1625.00, 1625.0 and 1625.

## Rounding - decimal places

It is very important to realize the difference between the following numbers 1625.00, 1625.0 and 1625.

If an answer to certain problem is given as 1625.00 , it means that the answer is accurate to 2 d.p., so the actual answer can be any number $x$, such that $1624.995 \leq x<1625.005$.

## Rounding - decimal places

It is very important to realize the difference between the following numbers 1625.00, 1625.0 and 1625.

If an answer to certain problem is given as 1625.00 , it means that the answer is accurate to 2 d.p., so the actual answer can be any number $x$, such that $1624.995 \leq x<1625.005$.

If however the answer is given as 1625 , then this is correct to the nearest unit, so the actual number can be any number $x$, such that $1624.5 \leq x<1625.5$.

## Rounding - decimal places

What's the conclusion of all this?

## Rounding - decimal places

What's the conclusion of all this? If you were to round 444.5971 to 2 d.p. then the answer is

## Rounding - decimal places

What's the conclusion of all this? If you were to round 444.5971 to 2 d.p. then the answer is 444.60

## Rounding - decimal places

What's the conclusion of all this? If you were to round 444.5971 to 2 d.p. then the answer is 444.60 and not 444.6 .

## Rounding - decimal places

What's the conclusion of all this? If you were to round 444.5971 to 2 d.p. then the answer is 444.60 and not 444.6 . The 0 at the end is important because it indicates the accuracy of the rounding.

## Rounding - decimal places

What's the conclusion of all this? If you were to round 444.5971 to 2 d.p. then the answer is 444.60 and not 444.6 . The 0 at the end is important because it indicates the accuracy of the rounding.

Of course $444.60=444.6$, but the rounded answer 444.60 indicates that the actual answer was between 444.595 and 444.605 ,

## Rounding - decimal places

What's the conclusion of all this? If you were to round 444.5971 to 2 d.p. then the answer is 444.60 and not 444.6 . The 0 at the end is important because it indicates the accuracy of the rounding.

Of course $444.60=444.6$, but the rounded answer 444.60 indicates that the actual answer was between 444.595 and 444.605 , while the rounded answer 444.6 indicates only that the actual answer was between 444.55 and 444.65 .

## Rounding - significant figures

We count significant figures starting from the first non-zero digit from the left and then count every digit (including the zeros).

## Rounding - significant figures

We count significant figures starting from the first non-zero digit from the left and then count every digit (including the zeros). Consider the number 0.004500545 .

## Rounding - significant figures

We count significant figures starting from the first non-zero digit from the left and then count every digit (including the zeros). Consider the number 0.004500545 . We will round it to

1 s.f.: 0.005

## Rounding - significant figures

We count significant figures starting from the first non-zero digit from the left and then count every digit (including the zeros). Consider the number 0.004500545 . We will round it to

1 s.f.: 0.005
2 s.f.: 0.0045

## Rounding - significant figures

We count significant figures starting from the first non-zero digit from the left and then count every digit (including the zeros). Consider the number 0.004500545 . We will round it to

1 s.f.: 0.005
2 s.f.: 0.0045
3 s.f.: 0.00450

## Rounding - significant figures

We count significant figures starting from the first non-zero digit from the left and then count every digit (including the zeros). Consider the number 0.004500545 . We will round it to

1 s.f.: 0.005
2 s.f.: 0.0045
3 s.f.: 0.00450
4 s.f.: 0.004501

## Rounding - significant figures

We count significant figures starting from the first non-zero digit from the left and then count every digit (including the zeros). Consider the number 0.004500545 . We will round it to

1 s.f.: 0.005
2 s.f.: 0.0045
3 s.f.: 0.00450
4 s.f.: 0.004501
Now consider the number 918273.222,

## Rounding - significant figures

We count significant figures starting from the first non-zero digit from the left and then count every digit (including the zeros). Consider the number 0.004500545 . We will round it to

1 s.f.: 0.005
2 s.f.: 0.0045
3 s.f.: 0.00450
4 s.f.: 0.004501
Now consider the number 918273.222, we will round it to
4 s.f.: 918300

## Rounding - significant figures

We count significant figures starting from the first non-zero digit from the left and then count every digit (including the zeros). Consider the number 0.004500545 . We will round it to

1 s.f.: 0.005
2 s.f.: 0.0045
3 s.f.: 0.00450
4 s.f.: 0.004501
Now consider the number 918273.222, we will round it to
4 s.f.: 918300
3 s.f.: 918000

## Rounding - significant figures

We count significant figures starting from the first non-zero digit from the left and then count every digit (including the zeros). Consider the number 0.004500545 . We will round it to

1 s.f.: 0.005
2 s.f.: 0.0045
3 s.f.: 0.00450
4 s.f.: 0.004501
Now consider the number 918273.222, we will round it to
4 s.f.: 918300
3 s.f.: 918000
2 s.f.: 920000

## Rounding - significant figures

We count significant figures starting from the first non-zero digit from the left and then count every digit (including the zeros). Consider the number 0.004500545 . We will round it to

1 s.f.: 0.005
2 s.f.: 0.0045
3 s.f.: 0.00450
4 s.f.: 0.004501
Now consider the number 918273.222, we will round it to
4 s.f.: 918300
3 s.f.: 918000
2 s.f.: 920000
1 s.f.: 900000

## Rounding - significant figures - exercises

Round the given given number accordingly:

## Rounding - significant figures - exercises

Round the given given number accordingly:
a) 25.519

## Rounding - significant figures - exercises

Round the given given number accordingly:
a) 25.519
i. 1 s.f.:

## Rounding - significant figures - exercises

Round the given given number accordingly:
a) 25.519
i. 1 s.f.: 30

## Rounding - significant figures - exercises

Round the given given number accordingly:
a) 25.519
i. 1 s.f.: 30
ii. 2 s.f.:

## Rounding - significant figures - exercises

Round the given given number accordingly:
a) 25.519
i. 1 s.f.: 30
ii. 2 s.f.: 26

## Rounding - significant figures - exercises

Round the given given number accordingly:
a) 25.519
i. 1 s.f.: 30
ii. 2 s.f.: 26
iii. 3 s.f.:

## Rounding - significant figures - exercises

Round the given given number accordingly:
a) 25.519
i. 1 s.f.: 30
ii. 2 s.f.: 26
iii. 3 s.f.: 25.5

## Rounding - significant figures - exercises

Round the given given number accordingly:
a) 25.519
i. 1 s.f.: 30
ii. 2 s.f.: 26
iii. 3 s.f.: 25.5
b) 321.0990

## Rounding - significant figures - exercises

Round the given given number accordingly:
a) 25.519
i. 1 s.f.: 30
ii. 2 s.f.: 26
iii. 3 s.f.: 25.5
b) 321.0990
i. 3 s.f.:

## Rounding - significant figures - exercises

Round the given given number accordingly:
a) 25.519
i. 1 s.f.: 30
ii. 2 s.f.: 26
iii. 3 s.f.: 25.5
b) 321.0990
i. 3 s.f.: 321

## Rounding - significant figures - exercises

Round the given given number accordingly:
a) 25.519
i. 1 s.f.: 30
ii. 2 s.f.: 26
iii. 3 s.f.: 25.5
b) 321.0990
i. 3 s.f.: 321
ii. 4 s.f.:

## Rounding - significant figures - exercises

Round the given given number accordingly:
a) 25.519
i. 1 s.f.: 30
ii. 2 s.f.: 26
iii. 3 s.f.: 25.5
b) 321.0990
i. 3 s.f.: 321
ii. 4 s.f.: 321.1

## Rounding - significant figures - exercises

Round the given given number accordingly:
a) 25.519
i. 1 s.f.: 30
ii. 2 s.f.: 26
iii. 3 s.f.: 25.5
b) 321.0990
i. 3 s.f.: 321
ii. 4 s.f.: 321.1
iii. 5 s.f.:

## Rounding - significant figures - exercises

Round the given given number accordingly:
a) 25.519
i. 1 s.f.: 30
ii. 2 s.f.: 26
iii. 3 s.f.: 25.5
b) 321.0990
i. 3 s.f.: 321
ii. 4 s.f.: 321.1
iii. 5 s.f.: 321.10

## Rounding - significant figures - exercises

Round the given given number accordingly:
a) 25.519
i. 1 s.f.: 30
ii. 2 s.f.: 26
iii. 3 s.f.: 25.5
b) 321.0990
i. 3 s.f.: 321
ii. 4 s.f.: 321.1
iii. 5 s.f.: 321.10
c) 0.002999

## Rounding - significant figures - exercises

Round the given given number accordingly:
a) 25.519
i. 1 s.f.: 30
ii. 2 s.f.: 26
iii. 3 s.f.: 25.5
b) 321.0990
i. 3 s.f.: 321
ii. 4 s.f.: 321.1
iii. 5 s.f.: 321.10
c) 0.002999
i. 1 s.f.:

## Rounding - significant figures - exercises

Round the given given number accordingly:
a) 25.519
i. 1 s.f.: 30
ii. 2 s.f.: 26
iii. 3 s.f.: 25.5
b) 321.0990
i. 3 s.f.: 321
ii. 4 s.f.: 321.1
iii. 5 s.f.: 321.10
c) 0.002999
i. 1 s.f.: 0.003

## Rounding - significant figures - exercises

Round the given given number accordingly:
a) 25.519
i. 1 s.f.: 30
ii. 2 s.f.: 26
iii. 3 s.f.: 25.5
b) 321.0990
i. 3 s.f.: 321
ii. 4 s.f.: 321.1
iii. 5 s.f.: 321.10
c) 0.002999
i. 1 s.f.: 0.003
ii. 2 s.f.:

## Rounding - significant figures - exercises

Round the given given number accordingly:
a) 25.519
i. 1 s.f.: 30
ii. 2 s.f.: 26
iii. 3 s.f.: 25.5
b) 321.0990
i. 3 s.f.: 321
ii. 4 s.f.: 321.1
iii. 5 s.f.: 321.10
c) 0.002999
i. 1 s.f.: 0.003
ii. 2 s.f.: 0.0030

## Rounding - significant figures - exercises

Round the given given number accordingly:
a) 25.519
i. 1 s.f.: 30
ii. 2 s.f.: 26
iii. 3 s.f.: 25.5
b) 321.0990
i. 3 s.f.: 321
ii. 4 s.f.: 321.1
iii. 5 s.f.: 321.10
c) 0.002999
i. 1 s.f.: 0.003
ii. 2 s.f.: 0.0030
iii. 3 s.f.:

## Rounding - significant figures - exercises

Round the given given number accordingly:
a) 25.519
i. 1 s.f.: 30
ii. 2 s.f.: 26
iii. 3 s.f.: 25.5
b) 321.0990
i. 3 s.f.: 321
ii. 4 s.f.: 321.1
iii. 5 s.f.: 321.10
c) 0.002999
i. 1 s.f.: 0.003
ii. 2 s.f.: 0.0030
iii. 3 s.f.: 0.00300

## Rounding - significant figures - exercises

Round the given given number accordingly:
a) 25.519
i. 1 s.f.: 30
ii. 2 s.f.: 26
iii. 3 s.f.: 25.5
b) 321.0990
i. 3 s.f.: 321
ii. 4 s.f.: 321.1
iii. 5 s.f.: 321.10
c) 0.002999
i. 1 s.f.: 0.003
ii. 2 s.f.: 0.0030
iii. 3 s.f.: 0.00300

## Rounding - signigicant figures

Again we need to remember that there is a difference between the answer 300 correct to 1 s.f. and 300 correct to 2 s.f. etc.

## Rounding - signigicant figures

Again we need to remember that there is a difference between the answer 300 correct to 1 s.f. and 300 correct to 2 s.f. etc.

If the answer given is 300 correct to 1 s.f., then the actual answer could have been any number between 250 and 350 ,

## Rounding - signigicant figures

Again we need to remember that there is a difference between the answer 300 correct to 1 s.f. and 300 correct to 2 s.f. etc.

If the answer given is 300 correct to 1 s.f., then the actual answer could have been any number between 250 and 350, and if the answer given is 300 correct to 2 s.f., then the actual answer could have been any number between 295 and 305 .

## Standard form

A number is written in a standard form if it's in the form $a \times 10^{k}$, where $1 \leq a<10$ and $k \in \mathbb{Z}$

## Standard form

A number is written in a standard form if it's in the form $a \times 10^{k}$, where $1 \leq a<10$ and $k \in \mathbb{Z}$

Consider the following list of numbers:

$$
12112, \quad 0.453, \quad 9, \quad 0.56 \times 10^{3}, \quad 353 \times 10^{-5}
$$

## Standard form

A number is written in a standard form if it's in the form $a \times 10^{k}$, where $1 \leq a<10$ and $k \in \mathbb{Z}$

Consider the following list of numbers:

$$
12112, \quad 0.453, \quad 9, \quad 0.56 \times 10^{3}, \quad 353 \times 10^{-5}
$$

How many of these numbers are written in standard form?

## Standard form

A number is written in a standard form if it's in the form $a \times 10^{k}$, where $1 \leq a<10$ and $k \in \mathbb{Z}$

Consider the following list of numbers:

$$
12112, \quad 0.453, \quad 9, \quad 0.56 \times 10^{3}, \quad 353 \times 10^{-5}
$$

How many of these numbers are written in standard form? None.

## Standard form

A number is written in a standard form if it's in the form $a \times 10^{k}$, where $1 \leq a<10$ and $k \in \mathbb{Z}$

Consider the following list of numbers:

$$
12112, \quad 0.453, \quad 9, \quad 0.56 \times 10^{3}, \quad 353 \times 10^{-5}
$$

How many of these numbers are written in standard form? None. The first three are missing the $10^{k}$ part, for the last two $a$ is not between 1 and 10 .

## Standard form

A number is written in a standard form if it's in the form $a \times 10^{k}$, where $1 \leq a<10$ and $k \in \mathbb{Z}$

Consider the following list of numbers:

$$
12112, \quad 0.453, \quad 9, \quad 0.56 \times 10^{3}, \quad 353 \times 10^{-5}
$$

How many of these numbers are written in standard form? None. The first three are missing the $10^{k}$ part, for the last two $a$ is not between 1 and 10 . We can turn them all into the standard form:
$1.2112 \times 10^{4}$,
$4.53 \times 10^{-1}$,
$9 \times 10^{0}$,
$5.6 \times 10^{2}$,
$3.53 \times 10^{-3}$

## Standard form

Write the following numbers in the standard form:
123

## Standard form

Write the following numbers in the standard form:
$123=1.23 \times 10^{2}$,

## Standard form

Write the following numbers in the standard form:
$123=1.23 \times 10^{2}$, 20030

## Standard form

Write the following numbers in the standard form:

$$
\begin{aligned}
& 123=1.23 \times 10^{2} \\
& 20030=2.003 \times 10^{4}
\end{aligned}
$$

## Standard form

Write the following numbers in the standard form:

$$
\begin{aligned}
& 123=1.23 \times 10^{2} \\
& 20030=2.003 \times 10^{4} \\
& 0.4561
\end{aligned}
$$

## Standard form

Write the following numbers in the standard form:

$$
\begin{aligned}
& 123=1.23 \times 10^{2} \\
& 20030=2.003 \times 10^{4} \\
& 0.4561=4.561 \times 10^{-1}
\end{aligned}
$$

## Standard form

Write the following numbers in the standard form:

$$
\begin{aligned}
& 123=1.23 \times 10^{2} \\
& 20030=2.003 \times 10^{4} \\
& 0.4561=4.561 \times 10^{-1} \\
& 2
\end{aligned}
$$

## Standard form

Write the following numbers in the standard form:

$$
\begin{aligned}
& 123=1.23 \times 10^{2} \\
& 20030=2.003 \times 10^{4} \\
& 0.4561=4.561 \times 10^{-1} \\
& 2=2 \times 10^{0}
\end{aligned}
$$

## Standard form

Write the following numbers in the standard form:

$$
\begin{aligned}
& 123=1.23 \times 10^{2} \\
& 20030=2.003 \times 10^{4} \\
& 0.4561=4.561 \times 10^{-1} \\
& 2=2 \times 10^{0} \\
& 0.000023
\end{aligned}
$$

## Standard form

Write the following numbers in the standard form:

$$
\begin{aligned}
& 123=1.23 \times 10^{2} \\
& 20030=2.003 \times 10^{4} \\
& 0.4561=4.561 \times 10^{-1} \\
& 2=2 \times 10^{0} \\
& 0.000023=2.3 \times 10^{-5}
\end{aligned}
$$

## Standard form

Write the following numbers in the standard form:

$$
\begin{aligned}
& 123=1.23 \times 10^{2} \\
& 20030=2.003 \times 10^{4} \\
& 0.4561=4.561 \times 10^{-1}, \\
& 2=2 \times 10^{0} \\
& 0.000023=2.3 \times 10^{-5}, \\
& 10
\end{aligned}
$$

## Standard form

Write the following numbers in the standard form:

$$
\begin{aligned}
& 123=1.23 \times 10^{2} \\
& 20030=2.003 \times 10^{4}, \\
& 0.4561=4.561 \times 10^{-1} \\
& 2=2 \times 10^{0} \\
& 0.000023=2.3 \times 10^{-5} \\
& 10=1 \times 10^{1}
\end{aligned}
$$

## Standard form

Write the following numbers in the standard form:

$$
\begin{aligned}
& 123=1.23 \times 10^{2} \\
& 20030=2.003 \times 10^{4}, \\
& 0.4561=4.561 \times 10^{-1} \\
& 2=2 \times 10^{0} \\
& 0.000023=2.3 \times 10^{-5} \\
& 10=1 \times 10^{1}
\end{aligned}
$$

The short test at the beginning of the next class will consist of rounding and expressing numbers in a standard form.

If you have any questions or doubts email me at T.J.Lechowski@gmail.com

