PRE-READING

Look at the pictures and read the title of the lesson.

1. Circle your answers about pictures 1 through 5. Write them on the lines.

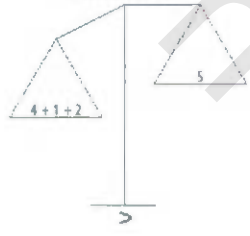
a) In picture 1, the teacher is teaching _____. (geometry / algebra)
b) The person in picture 2 is _____ about a maths problem. (thinking / dreaming)
c) Picture 3 shows two students _____ a maths problem. (discussing / fighting)
d) Picture 4 shows an example of a mathematical _____. (equation / inequality)
e) There are seven oval shapes of _____ sizes in picture 5. (equal / unequal)

Picture 1

Picture 2

Picture 3

Picture 4



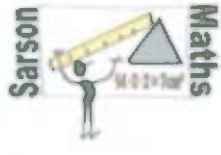
Picture 5

2. Read these statements about pictures 6–8 below. Tick (✓) Yes or No.

STATEMENTS	YES	NO
a) In picture 6, the teacher is explaining a grammar lesson.		
b) In picture 2, the person is drawing a triangle.		
c) In the same picture, the person has a yellow ruler in his right hand.		
d) The word "Science" in picture 8 is written in white with a red background.		
e) Computing is the name of one of the subjects you can see written in picture 8.		

Picture 6

Picture 7



Picture 8

READING TEXT

Use the words in the box below to complete the text.
Make sure that you put the correct word in each space.
You may use each word once only.

first	both	solved	third
less	different	three	previous

INEQUALITIES

Explanation

Now we will look at inequalities. Inequalities are _____ from equations. We saw that an equation says that two expressions are equal. An inequality, on the other hand, says that one expression is greater than, greater than or equal to, _____ than, or less than or equal to, another expression.

Look at the following example: $3x - 8 > 4$

Inequalities have properties (the properties of something are its important features, things we can use to describe it - remember we use adjectives to describe the properties of people and things - tall, big and expensive). We use these properties to solve the inequality.

i- The _____ property states that if *a* is less than *b*, then *a* plus *c* is less than *b* plus *c*.

ii- The second property states that if *a* is less than *b* and if *c* is greater than zero, then *ac* is less than *bc*.

iii- The _____ property states that if *a* is less than *b* and if *c* is less than zero, then *ac* is greater than *bc*.

These _____ properties are valid, that is they operate in the same way, if the $<$ is replaced with $>$, $\leq$, or $\geq$.

Now we are going to solve the above example of inequality in the same way we _____ the equation in the _____ reading lesson.

First, we add the same number to _____ sides of the expression.

Then we divide both sides by the same number.

Vocabulary & Understanding

1. Complete these sentences based on the Reading text. Circle 'a' or 'b'.

a)	_____ we will look at inequalities.	a. Now	b. Yesterday
b)	Inequalities are _____ equations.	a. similar to	b. different from
c)	Adjectives such as _____ describe people and things.	a. height	b. high
d)	Properties are valid when they operate in _____ way.	a. a different	b. the same
e)	Then we _____ both sides by the same number.	a. multiply	b. divide

2. Word Search Puzzle - Find these words in the puzzle.

(reading - equation - inequality - example - solve - same - lesson - divide)

I	G	V	N	A	S	S	N	B	M
E	L	I	Z	U	P	O	P	X	S
X	R	N	D	Q	I	K	L	B	A
A	C	E	C	T	W	A	E	V	M
M	Z	Q	A	X	M	K	S	G	E
P	N	U	D	D	E	R	S	F	M
L	Q	A	N	I	I	L	O	R	B
E	X	L	S	F	V	N	N	S	C
R	D	I	V	I	D	I	G	O	U
C	E	T	Q	M	U	M	D	M	U
X	Q	Y	I	C	O	U	C	E	B

Comprehension Check

1 Write the answers to the following questions about the Reading text.

a) How are inequalities different from equations?

_____

b) In order to describe people we use adjectives. What do we use to solve inequalities?

_____

c) Did we use the same number for both steps in solving the inequality on lines 31 and 33?

_____

2. Write the questions to these answers from the Reading text.

a. _____

Yes, inequalities are different from equations.

b. _____

An inequality says that one expression is greater than, greater than or equal to, less than, or less than or equal to, another expression.

c. _____

We use these properties to solve inequalities.

LANGUAGE FOCUS

Read the following 3 properties of inequalities.

A)

i- If *a* is less than *b*, then *a* plus *c* is less than *b* plus *c*.
ii- If *a* is less than *b* and if *c* is greater than zero, then *ac* is less than *bc*.
iii- If *a* is less than *b* and if *c* is less than zero, then *ac* is greater than *bc*.

a) Which word do all sentences start with?
b) Where is the comma (,) found in each of the three sentences?
c) In each of the three sentences, which word comes after the comma?

B) In each of the three sentences, there are two parts:

a) Part 1 begins with 'If' and ends with the comma.
b) Part 2 begins with the word 'then' and ends with the full stop (.).

C) Which of the two parts depends on the other? Discuss your answers in class.