DEFINITIONS:

rate ≡ a division $\frac{M}{N}$ where the quantities M and N are of different units.

M is commonly area, distance, volume, money, etc. and N is often *time*: $\frac{Area}{Time}, \frac{Dis\tan ce}{Time}, \frac{Volume}{Time}, \frac{Money}{Time}$

constant rate ≡ when the average rate is the same number in ***any*** time interval.

average rate ≡ is a rate with a ***specific*** time interval.

greater than **>** ≡ a number is greater than a second number if the first number is to the right→of the second number on the number line.

less than < ≡ a number is less than a second number if the first number is to the left← of the second number on a number line.

absolute value |x| ≡ the distance of the number from zero on the number line. (Always positive.)

open interval (*a*, *b*) ≡ all the numbers in a segment of the number line which does *not* include the endpoints *a* and *b*.

closed interval [*a*, *b*] ≡ all the numbers in a segment of the number line which does include the endpoints *a* and *b*.

half-open intervals [*a*, *b*) or (*a*, *b*]≡ all the numbers in a segment (or ray) of the number line which includes only one of the endpoints, either *a* or *b*.

distance between two points ≡ the length of the segment joining the two points. (Always positive.)