27) Question: Ten random trees in an orange grove with 1000 trees are numbered "One" through "Ten". They have the following numbers of oranges on them. Approximately, what is the number of oranges in the orange orchard?

A) 10,000
B) 100,000
C) 1,000,000
D) 10,000,000
nc

Tree #	# of Oranges
One	1051
Two	1129
Three	1206
Four	918
Five	1108
Six	1204
Seven	1081
Eight	812
Nine	871
Ten	1023

For speed, while solving something similar, only THINK the words in blue; WRITE only the words in other COLORS.

Given: 1)   The smallest number of oranges on a tree is   812.
2)   The largest   number of oranges on a tree is 1206
Solve: Approximately, what is the number of oranges in the orange orchard?

Road Map of Solution:
First   Step: Find the approximate average number of oranges on each tree.
Second Step: Multiply the above number with the total number of trees in the orange orchard to get the approx.. number of oranges in the orchard.

First   Step: Find the approximate average number of oranges on each tree.
1)   The smallest number of oranges on a tree is   812.
2)   The largest   number of oranges on a tree is 1206
3)   So, for all the trees on which oranges were counted, the number was within 1000 ± 200.
4)   The approximate average number of oranges per tree is around 1000.
Also, it could be as low   as   800.
Or,   it could be as high   as 1200.
Since the questions deals in approximates, we will run with the number 1000 oranges per tree.
OR
We could find the actual correct average for those 10 trees; numbered One, Two, Three,....., Nine and Ten.

$$\text{Actual Average for number of Oranges per Tree} \ = \ \frac{\text{total number of oranges that were counted}}{\text{Total number of trees on which the oranges were counted}}$$

$$= \frac{1051+1129+1206+918+1108+1204+1081+812+871+1023}{10}$$

$$= \frac{10403}{10}$$

Actual Average for number of Oranges per Tree =   1040.3

1,040.3 is closer to   the number 1,000 than to 100 or 10,000,
Hence, we will use   the number 1,000 (oranges per tree) for calculating the approx. number of oranges in the orchard