This book has permission to use the "N\&K method of COLORS".
For Questions 22 \& 23, refer to the following information

| Kids taking AP Courses in grade 12 in Henry County in 2013-17 |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ |
| AP Biology | 353 | 379 | 407 | 442 | 461 |
| AP Math | 251 | 273 | 308 | 339 | 358 |
| AP Physics | 233 | 271 | 311 | 349 | 369 |
| AP Spanish | 609 | 638 | 661 | 697 | 732 |
| AP French | 113 | 129 | 142 | 168 | 179 |

23) Question: In the choices given below, which subject's ratio of its numbers in 2013 and 2017 is closest to ratio of AP French's numbers in 2013 and 2017?
A) AP Biology
B) AP Math
C) AP Physics
D) APSpanish

For speed, while solving something similar, only THINK the words in blue; WRITE only the words in other COLORS.
Given: 1) From 2013 to 2017, the number of kids taking AP French changed from 113 to 179.
Solve: In the choices given below, which subject's ratio of its numbers in 2013 and 2017 is closest to ratio of AP French's numbers in 2013 and 2017?
Road Map of Solution:
First Step: Find the ratio of AP French's numbers in 2013 and 2017.
Second Step: Find the ratio of AP Biology's numbers in 2013 and 2017.
Third Step: Find the ratio of AP Math's numbers in 2013 and 2017.
Fourth Step: Find the ratio of AP Physics' numbers in 2013 and 2017.
Fifth Step: Find the ratio of AP Spanish's numbers in 2013 and 2017.
First Step: Find the ratio of AP French's numbers in 2013 and 2017.

$$
\begin{aligned}
& =113: 179 \\
& =\frac{113}{179} \\
& =\quad 0.631
\end{aligned}
$$

Second Step: Find the ratio of AP Biology's numbers in 2013 and 2017.

$$
=353: 461
$$

$=\frac{353}{461}$
$=0.766$
Third Step: Find the ratio of AP Math's numbers in 2013 and 2017.

$$
\begin{aligned}
& =251: 358 \\
& =\frac{251}{358} \\
& =\quad 0.701
\end{aligned}
$$

Fourth Step: Find the ratio of AP Physics' numbers in 2013 and 2017.

$$
=233: 370
$$

$=\frac{233}{369}$
$=0.631$
Fifth Step: Find the ratio of AP Spanish's numbers in 2013 and 2017.
$=609: 732$
$=\frac{609}{732}$
$=0.832$
AP Physics' ratio of numbers in 2013 \& 2017 is closest to ratio of AP French's numbers in 2013 \& 2017

