(P)

10% passed in all topics - 0.1X

10% did not pass in all topics - 0.1X

Remaining students - 0.8X

Of the Remaining Students, 20% passed in 1 topic

$= 0.20 \times 0.8X$

$= 0.2 \times 0.8X$

25% in 2 topics

$= 0.25 \times 0.8X$

24% in 4 topics

$= 0.24 \times 0.8X$

- Going by this pattern, 500 students passed in 3 topics, these students must be within the remaining students (0.8X).
- As remaining 10% (passed in all topics)
- remaining 10% (didn't pass in any topic).

- So $= (100 - 20 - 25 - 24) \times 0.8X = 500$

$= 31\% \times 0.8X = 500$

$= \frac{31}{100} \times 0.8X = 500$

$X = \frac{500 \times 100}{31 \times 0.8}$

≈ 2016 (Answer comes to be 250)