



9. According to a headline, 'Glaciers in the French Alps have lost a quarter of their area in the past 40 years'. What is the approximate percentage reduction in the length of the side of a square when it loses one quarter of its area, thereby becoming a smaller square?

A 13%                  B 25%                  C 38%                  D 50%                  E 65%

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9. A When a square loses a quarter of its area, thereby becoming a smaller square, three quarters of its area remains. Therefore the lengths of the sides of the original square have been multiplied by  $\sqrt{\frac{3}{4}} = \frac{1}{2}\sqrt{3} \approx 0.866$ . This means a reduction of  $(100 - 86.6)\%$  which is approximately 13%.