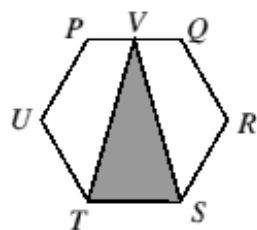11. *PQRSTU* is a regular hexagon and *V* is the midpoint of *PQ*.
     What fraction of the area of *PQRSTU* is the area of triangle *STV*?

     A $\dfrac{1}{4}$ B $\dfrac{2}{15}$ C $\dfrac{1}{3}$ D $\dfrac{2}{5}$ E $\dfrac{5}{12}$

---

11. **C**   Let x be the side length of the regular hexagon *PQRSTU* and let
     $h = PT = QS$, the perpendicular height of triangle *STV*.
     Thus the area of triangle *STV* is $\frac{1}{2}xh$ and the areas of triangles
     PTV and *QSV* are both $\frac{1}{2}\left(\frac{1}{2}xh\right) = \frac{1}{4}xh$. The perpendicular heights
     of triangles *PTU* and *QRS* are

     $$\frac{UR - PQ}{2} = \frac{2x - x}{2} = \frac{x}{2}.$$

     Hence the area of each of triangles *PTU* and *QRS* is $\frac{1}{2}h \times \frac{1}{2}x = \frac{1}{4}hx$.
     Therefore the area of triangle *STV* is one third of the area of *PQRSTU*.