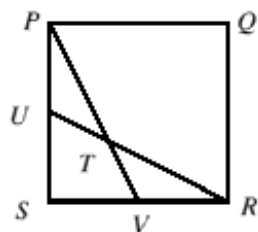




15. $PQRS$ is a square with U and V the mid-points of the sides PS and SR respectively. Line segments PV and UR meet at T .
What fraction of the area of the square $PQRS$ is the area of the quadrilateral $PQRT$?



- A $\frac{1}{2}$ B $\frac{5}{8}$ C $\frac{2}{3}$ D $\frac{3}{4}$ E $\frac{5}{9}$

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15. C Let O be the centre of square $PQRS$. The medians of triangle PSR intersect at T so $OT = \frac{1}{3}OS$.
Hence the area of triangle PTR is one third of the area of triangle PSR , that is one sixth of the area of square $PQRS$. So the required fraction = $\frac{1}{6} + \frac{1}{2} = \frac{2}{3}$.

