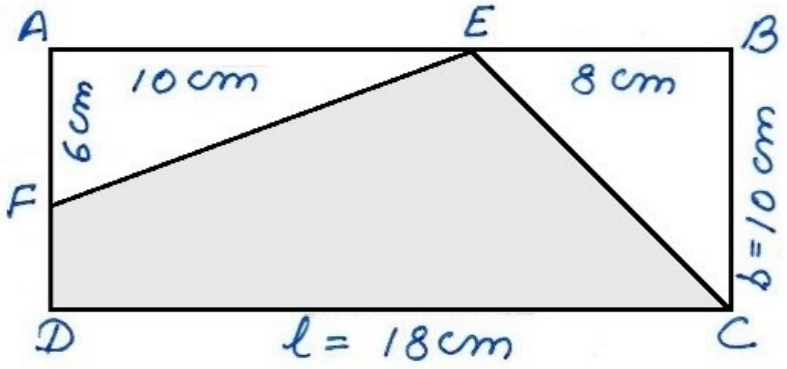
10 (i)



area of shaded portion

$= ar(\text{rect } ABCD) - ar(\triangle EAF) - ar(\triangle EBC)$

$= lb - \frac{1}{2} \times AF \times AE - \frac{1}{2} \times BE \times BC$

$= 18 \times 10 - \frac{1}{2} \times 6 \times 10 - \frac{1}{2} \times 8 \times 10$

$= 180 - 30 - 40$

$= 180 - 70$

$= 110 \text{ cm}^2$

10 (ii) area of shade portion

$= \text{area of Square} - ar(\triangle I) - ar(\triangle II) - ar(\triangle III)$

$= s^2 - \frac{1}{2} TS \times SU - \frac{1}{2} \times UR \times QR - \frac{1}{2} \times PQ \times PS$

$= 20^2 - \frac{1}{2} \times 10 \times 10 - \frac{1}{2} \times 10 \times 20 - \frac{1}{2} \times 20 \times (20-10)$

$= 400 - 50 - 100 - 100$

$= 400 - 250$

$= 150 \text{ cm}^2$