

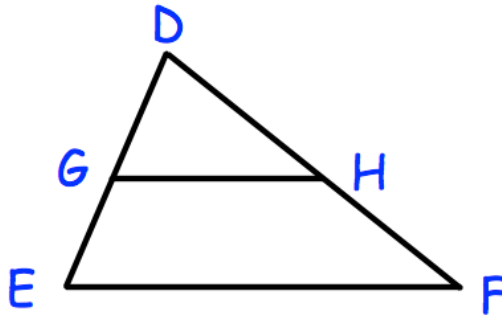
December 13<sup>th</sup>

DG = 3cm and DE = 5cm.

GH is parallel to EF.

The area of triangle DGH is  $6\text{cm}^2$

Find the area of GHFE



Scale factor between lengths in triangle DGH and triangle DEF =  $\frac{DE}{DG} = \frac{5}{3}$

Therefore scale factor for area between the triangles is  $\left(\frac{5}{3}\right)^2 = \frac{25}{9}$

Hence area of DEF =  $6 \times \frac{25}{9} = \frac{50}{3} \text{cm}^2$

Therefore, area of GHFE =  $\frac{50}{3} - 6 = \frac{32}{3} \text{cm}^2$