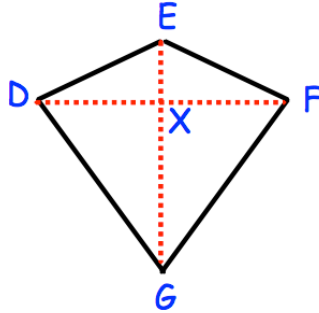


March 21st

DEFG is a kite with area 168 cm^2
 $DF = 16\text{cm}$ and $EX = 6\text{cm}$.

Calculate the perimeter.



Area of kite = $\frac{1}{2}$ x product of the diagonals

Giving

$$168 = \frac{1}{2} \times DF \times EG$$

Hence

$$336 = 16 \times EG$$

Therefore $EG = 21\text{cm}$

Hence $XG = 15\text{cm}$

Using Pythagoras

$$EF^2 = 6^2 + 8^2 \quad \text{so} \quad EF = 10\text{cm}$$

$$DG^2 = 8^2 + 15^2 \quad \text{so} \quad DG = 17\text{cm}$$

So perimeter = $10 + 10 + 17 + 17 = \mathbf{54\text{cm}}$