



$$\begin{aligned}
 \text{Perimeter of rectangle ABCD} &= 2 * (l + w) \\
 &= 2 * (5\text{cm} + 3\text{cm}) \\
 &= 16\text{cm}
 \end{aligned}$$

$$\begin{aligned}
 \text{Perimeter of rectangle GFEA} &= 2 * (l + w) \\
 &= 2 * (4\text{cm} + 2\text{cm}) \\
 &= 12\text{cm}
 \end{aligned}$$

$$\begin{aligned}
 \text{Total Perimeter} &= \overline{AD} + \overline{DC} + \overline{CB} + \overline{BE} + \overline{EF} + \overline{FG} + \overline{GA} \\
 &= 3\text{cm} + 5\text{cm} + 3\text{cm} + 1\text{cm} + 2\text{cm} + 4\text{cm} + 2\text{cm} \\
 &= 20\text{cm}
 \end{aligned}$$