

1. $\overrightarrow{AD} \cdot \overrightarrow{AG} = 3 \times 6 = 18$
2. $\overrightarrow{DC} \cdot \overrightarrow{DF} = (-1) \times 2 = -2$
3. $\overrightarrow{AB} \cdot \overrightarrow{DE} = 1 \times 1 = 1$
4. $\overrightarrow{CD} \cdot \overrightarrow{HD} = 1 \times (-4) = -4$