6.3.5

$$u \cdot (V \times W) = |V \cdot (U \times W)| \quad \text{volume of parallelepiped}$$

$$\text{Volume} = \text{Area} \times \text{Height}$$

1- basic Area $= U \times W$

$$= |U||W| \sin \theta$$

2- Height $= U \cdot \dfrac{V \times W}{|V \times W|}$

$$\dfrac{|u \cdot (U \times W)|}{V \times W}$$

$$\text{Volume} = U \times W \times \dfrac{|U \cdot (U \times W)|}{|U \times W|}$$

$$= U(V \times W)$$