

Example 195 : As shown in Figure 1 , \triangle ABC , AB \bot AC , take B , C as the center, BA , CA as the radius to draw a circle, intersection point A , D , there is E on circle B , extend DE to intersect DE at F , verify : AE \bot AF.

Proof:
$$\frac{A-E}{A-F} = \frac{\frac{D-F}{D-C}}{\frac{F-C}{F-D}} \frac{\frac{A-E}{A-D}}{\frac{D-F}{D-C}} \frac{\frac{F-C}{F-A}}{\frac{A-F}{A-C}} \frac{\frac{A-D}{A-B}}{\frac{F-D}{F-A}} \frac{A-B}{A-C}$$
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