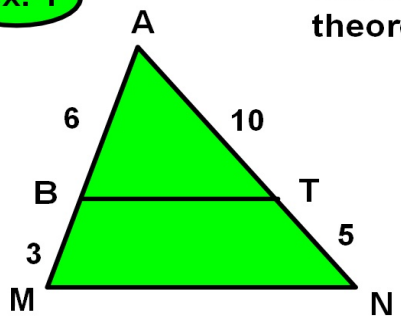
7-5 Theorems for Similar Triangles

Std. 5.0

ex. 1

Name similar triangles. What postulate or theorem justifies the answer?



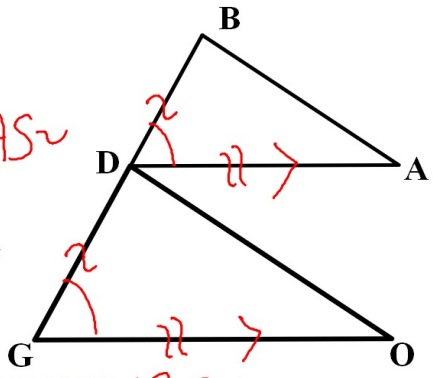
Sec 7-5 Hon. 9

ex. 2

Given: $\overline{DA} \parallel \overline{GO}$, $\frac{BD}{DG} = \frac{DA}{GO}$

Prove: $BA \cdot GO = DO \cdot DA$

SAS~



① $\overline{DA} \parallel \overline{GO}$, $\frac{BD}{DG} = \frac{DA}{GO}$	① Given
② $\angle BDA \cong \angle G$	② if lines ∥, corr ∠s ≅
③ $\triangle BDA \sim \triangle DGO$	③ SAS ~
④ $\frac{BA}{DO} = \frac{DA}{GO}$	④ If △s similar, corres. sides proportional
⑤ $BA \cdot GO = DO \cdot DA$	⑤ cross-mult.