## $\triangle \mathrm{ABC}, \triangle \mathrm{AMN}$ and $\triangle \mathrm{AXY}$ are similar by the AAP



That means BC:MN have the same ratio as $\mathrm{MN}: \mathrm{XY}$. In fact, I could continue the relationships by saying $\mathrm{BC}: \mathrm{AB}$ as $\mathrm{MN}: \mathrm{AM}$ as XY:AX.

Let me write some of those relationships in words: the side opposite $\angle \mathrm{A}$ to the hypotenuse of each of the triangles, $\triangle \mathrm{ABC}, \triangle \mathrm{AMN}$ and $\triangle \mathrm{AXY}$ have the same ratio.

$$
\frac{B C}{A B}=\frac{M N}{A M}=\frac{X Y}{A X}
$$

