## Answer on Question \#80740 - Math - Geometry

## Q8uestion

Y is between X and $\mathrm{Z} . \mathrm{T}$ is between Y and Z . If $\mathrm{XZ}=90, \mathrm{YT}=22$, and $\mathrm{XY}=\mathrm{TZ}$, what is XT?


## Solution

$X Z=X Y+Y T+T Z ;$
$X Y=T Z$.
Next,
$90=X Y+22+T Z ;$
$\mathrm{XY}+\mathrm{TZ}=90-22$;
XY+TZ=68;
$\mathrm{XY}=\mathrm{TZ}=68 / 2=34$;
$\mathrm{XT}=\mathrm{XY}+\mathrm{YT}=34+22=56$.

Answer: XT=56.

