Trapezoid $A B C D$ is similar to trapezoid $E F G H$. Complete the following statements.

1. see answer column
2. see answer column Use each side only once

3. $\angle B \cong$ $\qquad$
4. $\frac{A B}{E F}=\frac{\square}{\overline{G H}}=\frac{B C}{\square}=\square$
5. $\triangle R S T \sim \Delta W X Y$. (include a sketch and show work)
6. $S T=$ $\qquad$
$R S=2, W X=5, S T=x+1$, and $X Y=3 x-1$.

Find $S T$ and $X Y$.
$\qquad$

For Problems 4 and 5, explain why the triangles are similar ( $A A \sim, S S S \sim$, or $S A S \sim$ ) and write a similarity statement.

4. $\qquad$
$\Delta$ $\qquad$ $\sim \Delta$ $\qquad$
5. $\qquad$
$\Delta W X Y \sim \Delta L M N$ Find the missing measures in the figure. Show work.
6. $W Y$
$\Delta$ $\qquad$ $\sim \Delta$ $\qquad$
6. $W Y=$ $\qquad$
7. $L M$

7. $L M=$ $\qquad$

