Practice 3-2

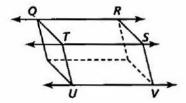
Proving Lines Parallel

1. Developing Proof Complete the paragraph proof for the figure shown.

Given: $\angle RQT$ and $\angle QTS$ are supplementary. $\angle TSV$ and $\angle SVU$ are supplementary.

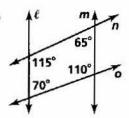
Prove: $\overrightarrow{QR} \parallel \overrightarrow{UV}$

Proof Because $\angle RQT$ and $\angle QTS$ are supplementary, $\angle RQT$ and $\angle QTS$ are **a.** ? angles. By the Same-Side Interior Angles Theorem, **b.** ? \parallel **c.** ? Because $\angle TSV$ and $\angle SVU$ are supplementary, $\angle TSV$ and $\angle SVU$ are **d.** ? angles. By the **e.** ? Theorem, $\overrightarrow{TS} \parallel \overrightarrow{UV}$. Because \overrightarrow{QR} and \overrightarrow{UV} both are parallel to **f.** ? $\overrightarrow{QR} \parallel \overrightarrow{UV}$ by Theorem **g.** ?

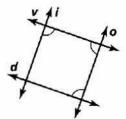


Which lines or segments are parallel? Justify your answer with a theorem or postulate.

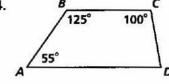
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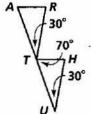
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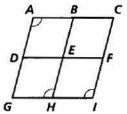
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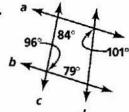
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6.

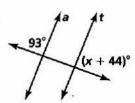


7.

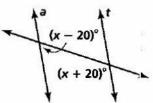


Algebra Find the value of x for which $a \parallel t$.

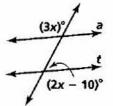
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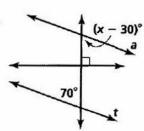
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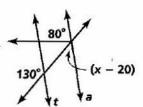
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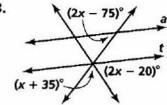
11.



12.



13.



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