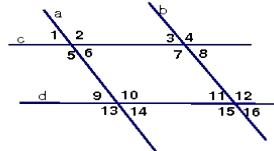


Name _____ Per _____

Parallel Lines Worksheet

- 1.) Assume that $a//b$ and $c//d$.
- Name all angles congruent to $\angle 4$.
 - Name all angles supplementary to $\angle 4$.
 - If $m\angle 16 = 50$, then $m\angle 14 = ?$ and $m\angle 2 = ?$
 - If $m\angle 9 = x$, then $m\angle 12 = ?$ and $m\angle 7 = ?$

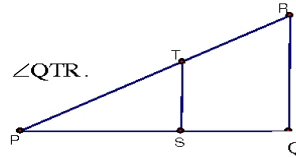


- 2.) Solve for x, y .

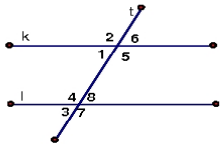
<p>a. $k//j; m//n$</p>	<p>b. $AB//CD; AB \perp BC$</p>
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- 3.) Given: $\overline{PQ} \perp \overline{QR}; \overline{ST} // \overline{QR}; \overline{QT}$ bisects $\angle PQR$.

- Find the measures of $\angle QST, \angle SQT$, and $\angle STQ$.
- If you are also given that $m\angle R = 60$, find the measure of $\angle QTR$.



- 4.) Write a 2-column proof.



- Given: $k//l$ Prove: $\angle 6$ is supp. to $\angle 7$.
- Given: $k//l$ Prove: $\angle 2 \cong \angle 7$ (You are proving alternate exterior angles are congruent.)

- 5.) State which segments (if any) are parallel? State the postulate or theorem that justifies your answer.

<p>a.</p>	<p>b.</p>
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