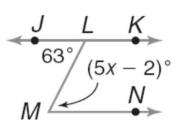
Name: _____

Parallel Lines and Special Angles

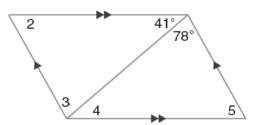
A) Given that $\overline{JK} \square \overline{MN}$, find:



1) The value of x

2) *m∠LMN*

- 3) *m∠KLM*
- B) Find the measure of each numbered angle.



4) *m*∠2

- 5) *m*∠3
- 6) *m∠*4

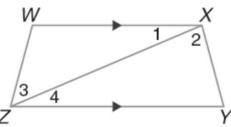
7) *m∠*5

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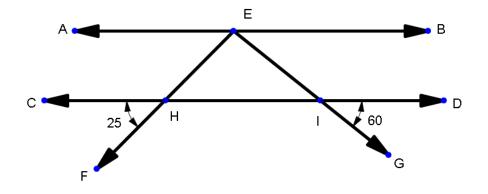
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C) 8) In the figure below, explain why you can conclude that $\angle 1 \cong \angle 4$, but you cannot tell whether $\angle 3$ is congruent to $\angle 2$.



D) In the accompanying diagram, $\overrightarrow{AB} \square \overrightarrow{CD}$. From point *E* on \overrightarrow{AB} , transversals \overrightarrow{EF} and \overrightarrow{EG} are drawn, intersecting \overrightarrow{CD} at *H* and *I*, respectively.



- 9) If $m \angle CHF = 25^{\circ}$ and $m \angle DIG = 60^{\circ}$, what is $m \angle HEI$?
- E) Given: $\Box ABC$, \overrightarrow{CE} bisects exterior $\angle BCD$ $\overrightarrow{CE} \Box \overrightarrow{AB}$
 - 10) Prove: $\angle A \cong \angle B$

