

For the one theorem assigned to your Group: symbolically write, do a Thinking Land, and then prove. Be sure to follow the Writing Guidelines.

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**Theorem 8D.** If integers  $a$  and  $b$  satisfy

$$3 \mid (a - 2) \quad \text{and} \quad 3 \mid (b - 2)$$

then

$$3 \mid (ab - 1).$$

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**Theorem 2.** If integers  $a$  and  $b$  satisfy

$$5 \mid (a - 3) \quad \text{and} \quad 5 \mid (b + 4)$$

then

$$5 \mid (a + b - 9).$$

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