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Name: \_\_\_\_\_

QUIZ 10 

MATH 300  
September 24, 2024

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1. Suppose  $a, b, c, d \in \mathbb{Z}$ . Use direct proof to prove the following statement.  
Use completely formed sentences. Use definitions when appropriate.

**Proposition:** If  $a \mid b$  and  $c \mid d$ , then  $ac \mid bd$ .

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