

► Recall Symbolically Write Guidelines, which is posted homework page and handout page for your convenience.

Exercise. A variant of Exercise 3.4.5a.

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Theorem 4. For all integers a , b , and d with $d \neq 0$, if d divides a or d divides b , then d divides the product ab .

i. Symbolically write Theorem 4.

cut this out and put your solution here

ii. Prove Theorem 4. Hint: Notice that the hypothesis is a disjunction. So use two cases.