

Math 365 - Quiz 3

Name and Student ID:

Question: Find the largest  $n \in \mathbb{Z}$  such that  $288^n \mid 117 \cdot 118 \cdot 119 \cdots 289$ .

Math 365 - Quiz 3

Name and Student ID:

Question: Find the largest  $n \in \mathbb{Z}$  such that  $800^n \mid 148 \cdot 149 \cdot 150 \cdots 518$ .

Math 365 - Quiz 3

Name and Student ID:

Question: Find the largest  $n \in \mathbb{Z}$  such that  $675^n \mid 173 \cdot 174 \cdot 175 \cdots 638$ .

Math 365 - Quiz 3

Name and Student ID:

Question: Find the largest  $n \in \mathbb{Z}$  such that  $784^n \mid 207 \cdot 208 \cdot 209 \cdots 784$ .

Math 365 - Quiz 3

Name and Student ID:

Question: Find the largest  $n \in \mathbb{Z}$  such that  $60^n \mid 195 \cdot 196 \cdot 197 \cdots 256$ .

Math 365 - Quiz 3

Name and Student ID:

Question: Find the largest  $n \in \mathbb{Z}$  such that  $270^n \mid 183 \cdot 184 \cdot 185 \cdots 365$ .