

Prob 2 a) $25^3 \cdot 4^3 = 25 \cdot 25 \cdot 25 \cdot 4 \cdot 4 \cdot 4 = 100 \cdot 100 \cdot 100 = 100^3$
 $= 1000000 = 10^6$

TA: $25^3 \cdot 4^3 = (25 \cdot 4)^3 = 100^3 = 1000000 = 10^6$

b) $\frac{14^2}{7^2} = \frac{\cancel{14}^2 \cdot \cancel{14}^2}{\cancel{7} \cdot \cancel{7}} = \frac{2 \cdot 2}{1 \cdot 1} = 4$

TA: $\frac{14^2}{7^2} = \left(\frac{14}{7}\right)^2 = 2^2 = 4$