

Math 2013 - Introduction to Discrete Mathematics

Quiz #9 - 2005.10.17

Solutions

1. Convert 345_6 to base 10.

$$345_6 = 5 \cdot 6^0 + 4 \cdot 6^1 + 3 \cdot 6^2 = 137_{10}$$

2. Convert 645_{10} to base 7.

$$645 = 92 \cdot 7 + 1$$

$$92 = 13 \cdot 7 + 1$$

$$13 = 1 \cdot 7 + 6$$

$$1 = 0 \cdot 7 + 1$$

Therefore, $645_{10} = 1611_7$.