CSI33 Chapter 11

True/False questions (p. 422)

1. **True** (you can find explanation on p.413 – the last paragraph, and the code of append operation that requires allocation on the very next page, on top)
2) **True** (vice versa is false)
3) **False** (vice versa is true)
4) **True**
5) **False** (if it is a pointer, then we need to re-work the code)

Multiple Choice questions (p. 423)

1) a)
2) c) \( \Theta(n) \)
4) c) \( \Theta(n) \)

Short Answer Questions (p. 424):

1) I'd say \( 4 \) (capacity + 3) for 32-bit system and \( 8(\text{capacity} + 3) \) for 64-bit systems. *Where capacity is \( \geq n \), but on average, the difference between \( n \) and capacity is small.*

2) I'd say \( 4(2n)=8n \) for 32-bit systems and \( 8(2n)=16n \) for 64-bit systems. *each node has two vars (value and link/reference to the next node)*