MATH 240 - Change of coordinates

Definition Let B = {b1, ..., bn} be a basis for Rn. The *change of coordinates matrix* from B to the standard basis {e1, ..., en} for Rn, denoted by PB is defind by PB = [b1 ... bn].

PB*[v]B = v
and
[v]B = PB^-1 * v

Definition The change of coordinates matrix from B to C, denoted by Pc<-b is given by *Pc<-b = [[b1]c ... [bn]c]* where *B = {b1, ..., bn}*

Property For every v in V we have:
Pc<-b * [v]b = [v]c