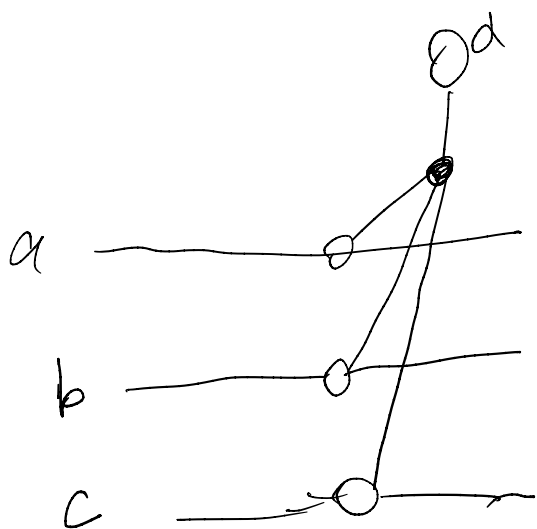
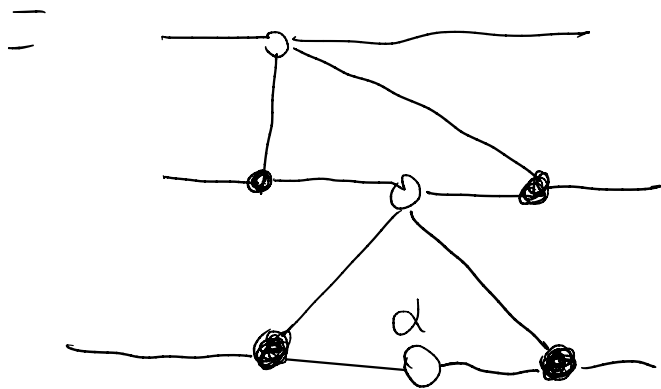
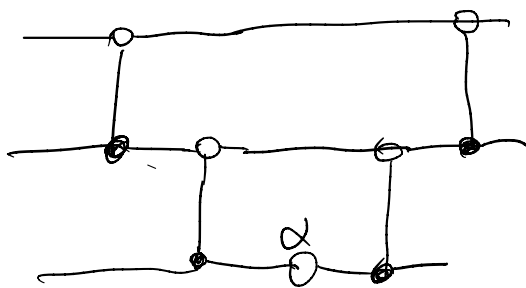
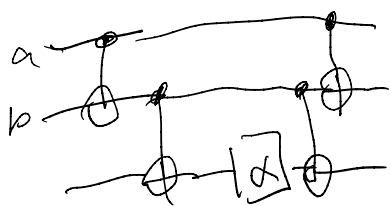


* Phase gadgets

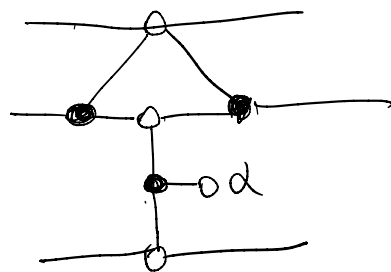


$$= U_f \quad \text{where} \quad f(a, b, c) = d(a \oplus b \oplus c)$$

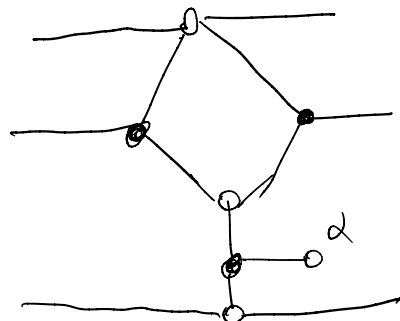
$$U_f |a, b, c\rangle = e^{i d(a \oplus b \oplus c)} |a, b, c\rangle$$

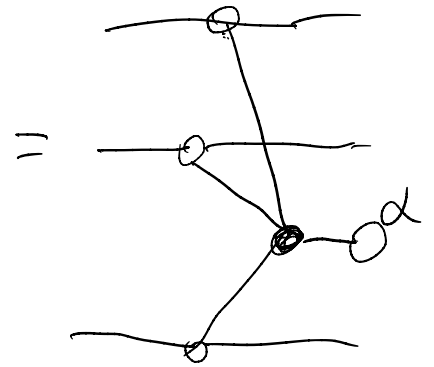
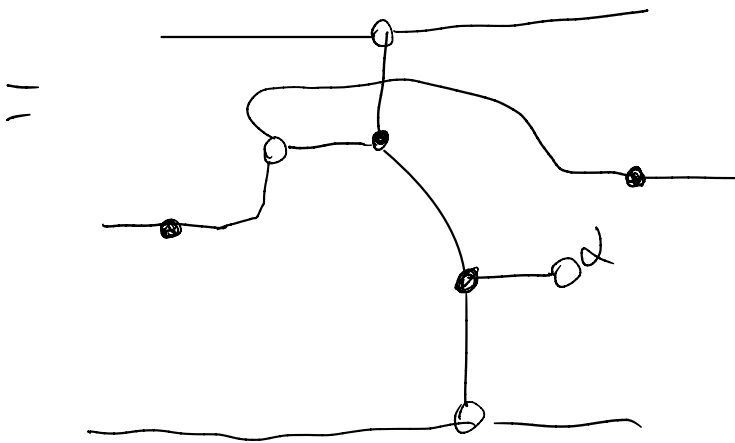
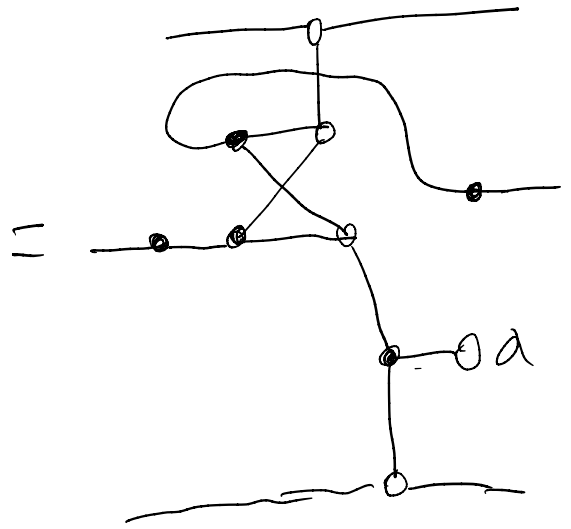
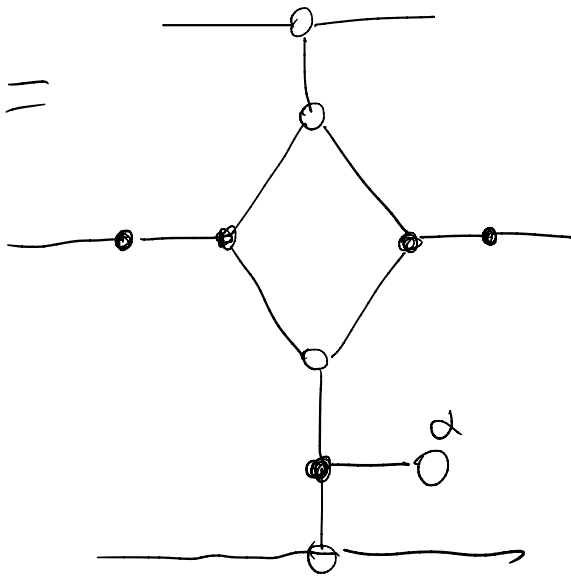


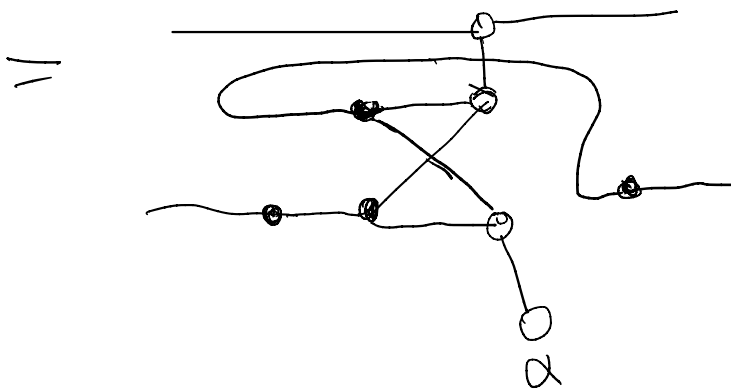
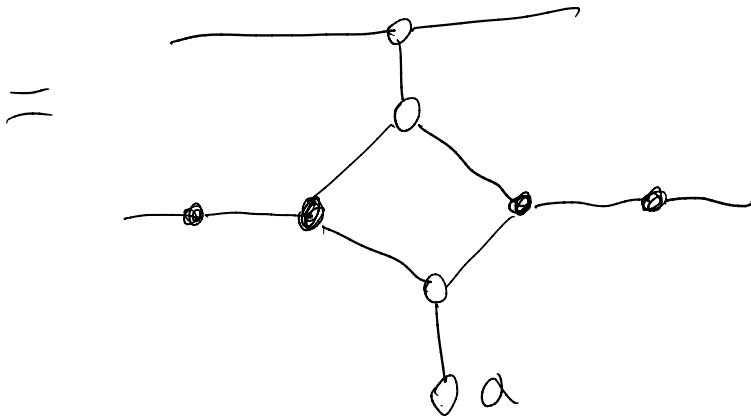
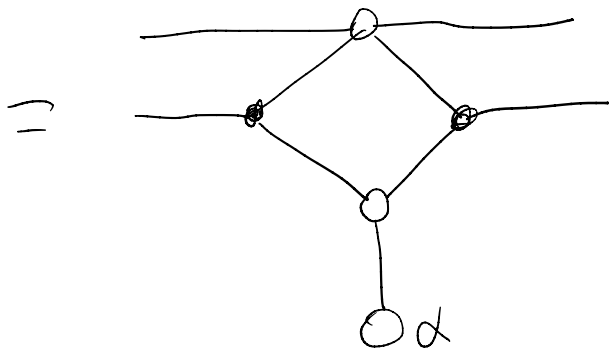
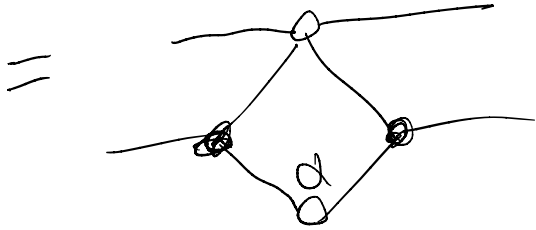
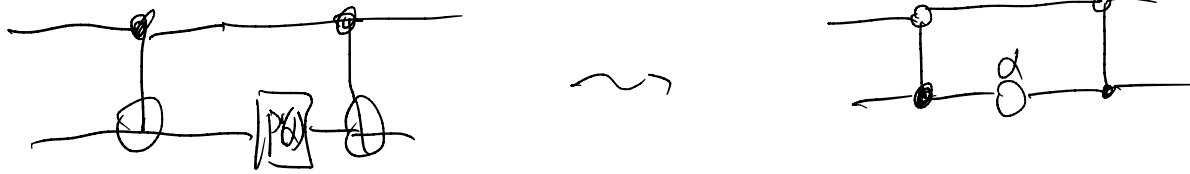
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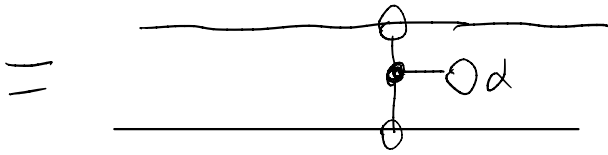
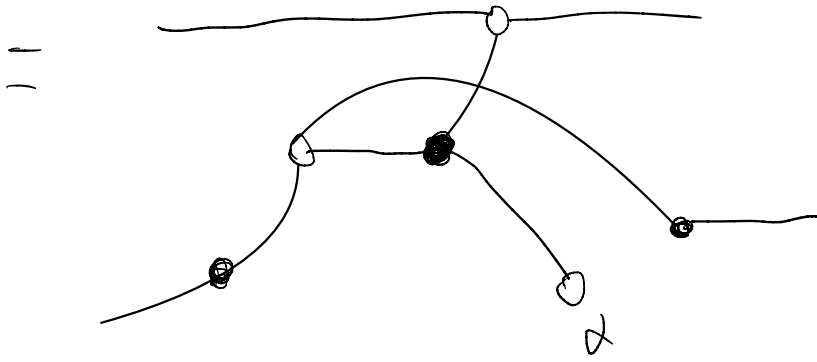


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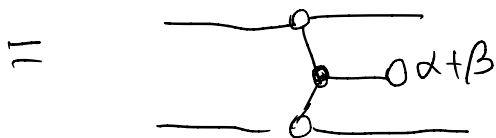
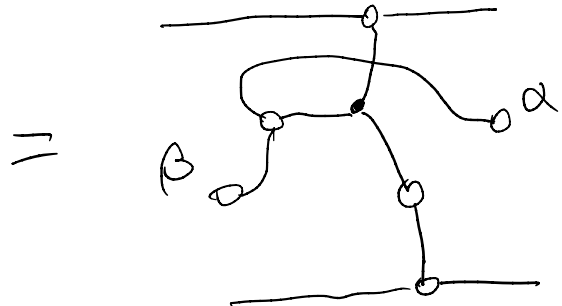
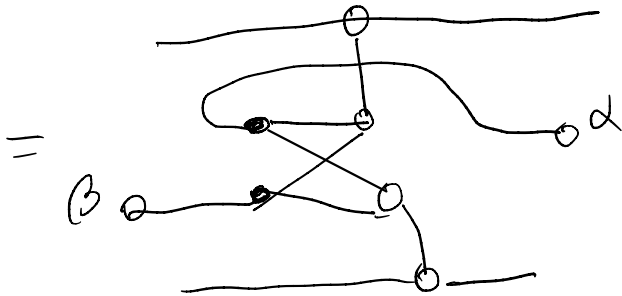
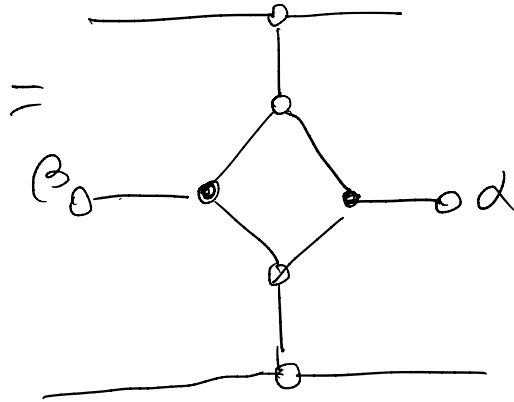
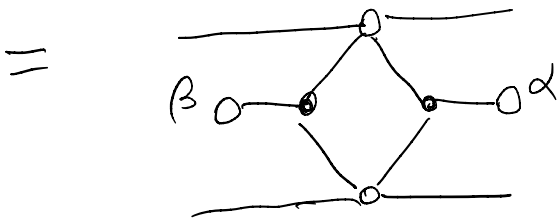
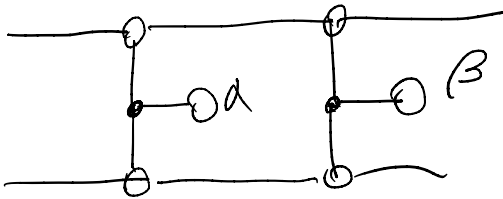




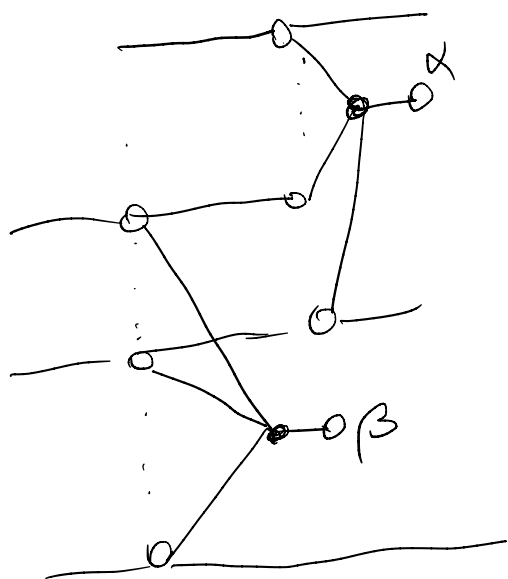




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* Commutation



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