## Problem 4: Combinations of 50's and 20's

Seth is taking a trip and taking along exactly 1,800 in cash. His mother gives him cash for the trip in denominations of $\$ 20$ and $\$ 50$ bills only. How many different combinations are possible for $\$ 1,800$ and what are they?
(Hint: The Euclidean algorithm might be useful here.)

As always, show your work, fully explain and justify your answer.

Posting Date 10/06/2017. Submit solutions to Noah Aydin, RBH 319 (e-mail or hard-copy, but hard copy submissions must include a time stamp) by 4 pm on $10 / 20 / 2017$.

