The domain will then be all other m-values.

The domain is all values that m is allowed to be.

When is this denominator equal to zero? $m^2 - 5 m + 4 = 0$

Since I can't divide by zero (division by zero isn't allowed, I need to find all values of m that would cause division by zero.

m=4 or 1 then the domain of q is $\{\mathsf{m} \mid \mathsf{m} \neq \mathsf{4} \text{ or } \mathsf{1}\}$