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Alice is using ElGamal public key encryption system to send messages to Bob. On Monday she encrypts a message  $m$  and sends it to Bob. No response from Bob, so on Tuesday she encrypts the same message  $m$  and sends it to Bob. Are both encryptions the same? Explain briefly.

The encryptions will be the same because the public key used to encrypt the message, as well as the message, does not change.