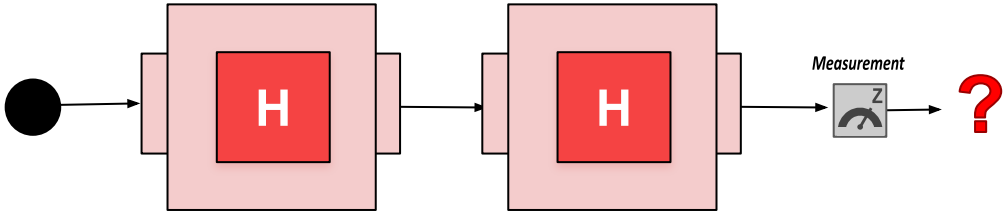
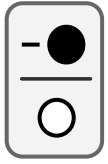


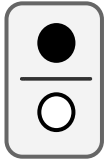
The outcome of the H gate (

) is always random. (true / false) (we can say they are not random but are probabilistic)

Select all possible outcomes for this circuit (at ?).



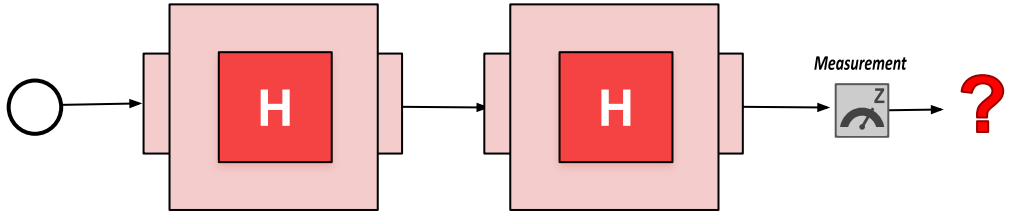
A. 

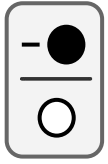
B. 

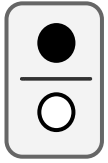
C. ○

D. ●

Select all possible outcomes for this circuit (at ?).



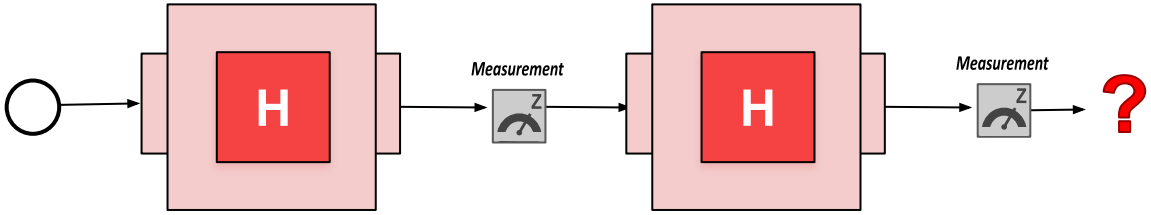
A. 

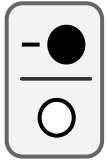
B. 

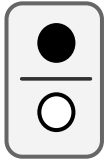
C. 

D. 

Select all possible outcomes for this circuit (at ?).



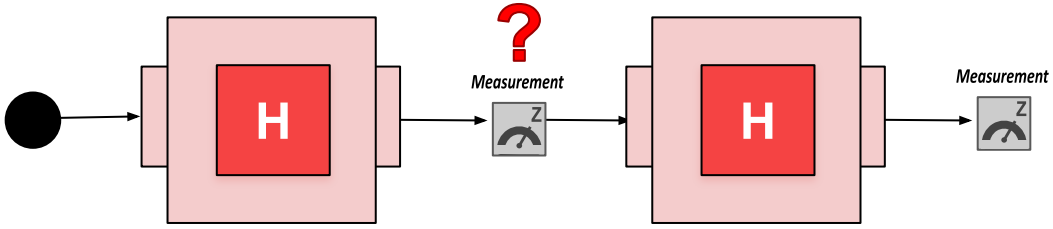
A. 

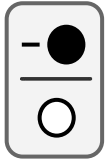
B. 

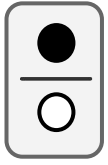
C. ○

D. ●

Select all possible outcomes for this circuit (at ?).

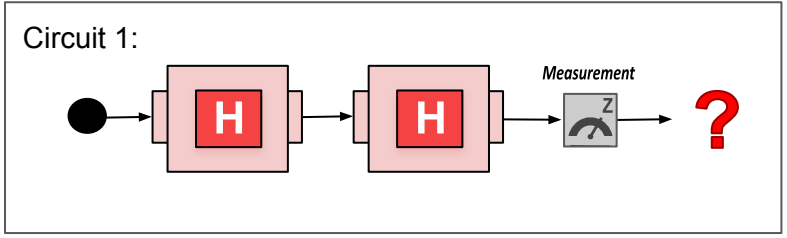


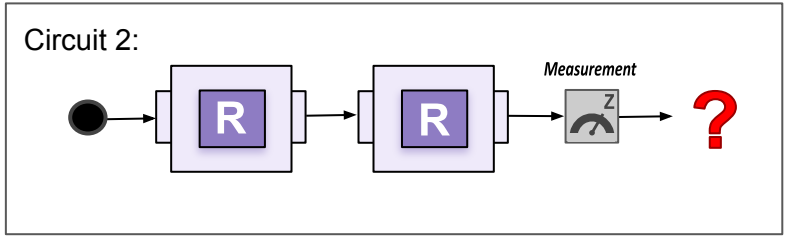
A. 

B. 

C. ○

D. ●

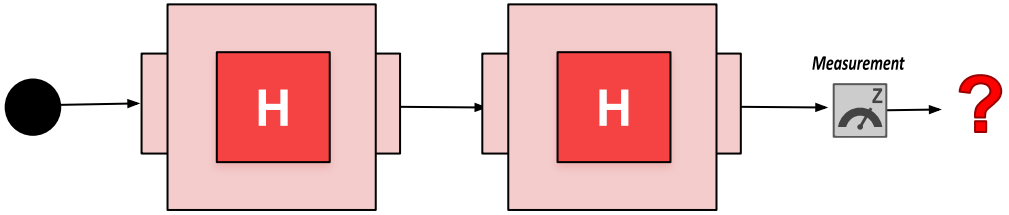




The outcome of the circuits pictured above will _____ be the same.

A. Always
B. Sometimes
C. Never

Select the option that describes the probability of each outcome for this circuit (at ?).



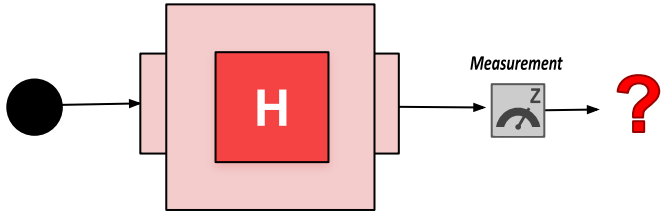
A. ● : 50%
○ : 50%

B. ● : 100%
○ : 0%

C. ● : 0%
○ : 100%

D. ● : 75%
○ : 25%

Select the option that describes the probability of each outcome for this circuit (at ?).



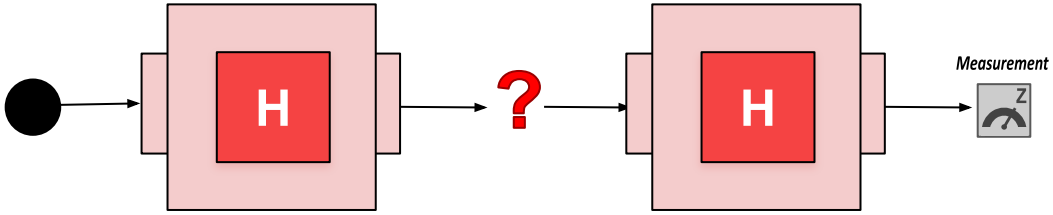
A. ● : 50%
○ : 50%

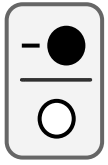
B. ● : 100%
○ : 0%

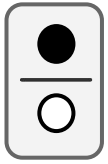
C. ● : 0%
○ : 100%

D. ● : 75%
○ : 25%

Select the option that describes the state of the qubit at ?.



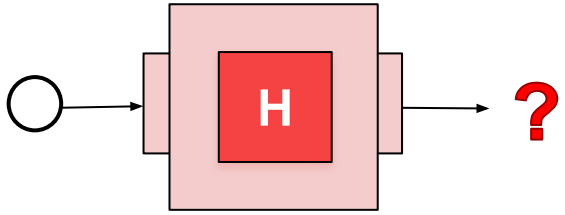
A. 

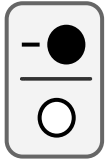
B. 

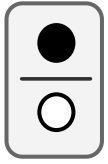
C. ○

D. ●

Select the option that describes the state of the qubit at ?.



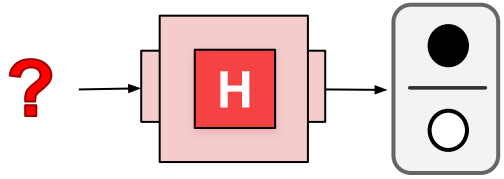
A. 

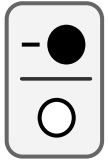
B. 

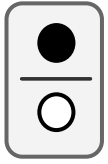
C. ○

D. ●

Select all possible inputs for this circuit (at ?).



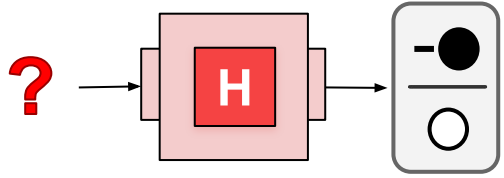
A. 

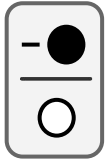
B. 

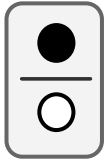
C. ○

D. ●

Select all possible inputs for this circuit (at ?).



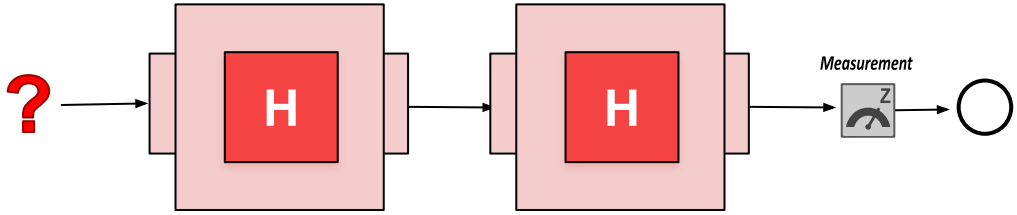
A. 

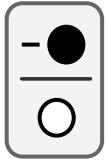
B. 

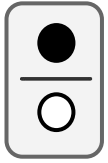
C. ○

D. ●

Select all possible inputs for this circuit (at ?).



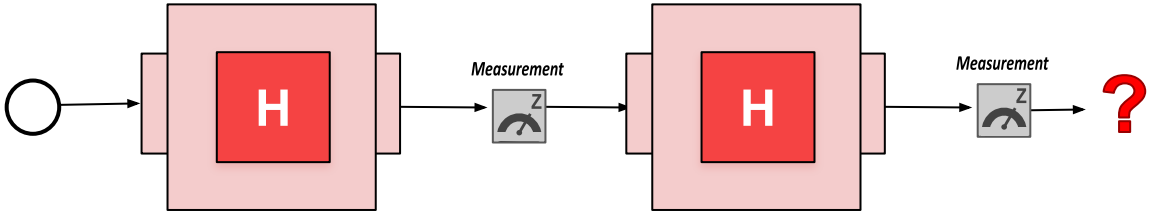
A. 

B. 

C. ○

D. ●

Select the option that describes the probability of each outcome for this circuit (at ?).



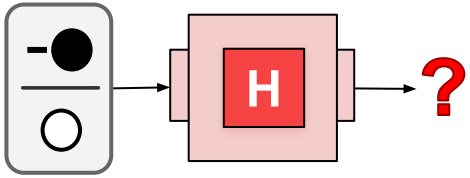
A. ● : 50%
○ : 50%

B. ● : 100%
○ : 0%

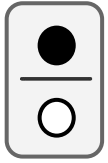
C. ● : 0%
○ : 100%

D. ● : 75%
○ : 25%

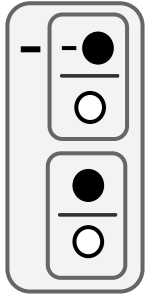
Select the option(s) that describe the state of the qubit at ?.



A.

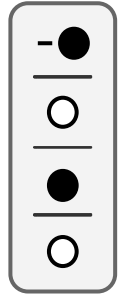


B.

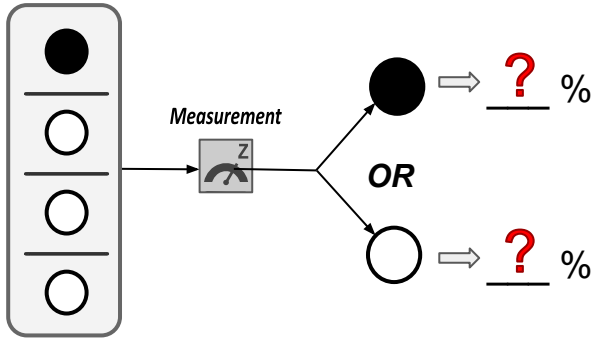


C.

D.



Select the option that describes the probability of each outcome.



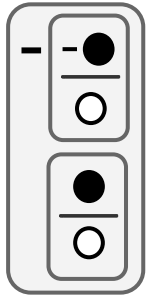
A. ● : 50%
○ : 50%

B. ● : 100%
○ : 0%

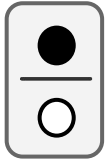
C. ● : 25%
○ : 75%

D. ● : 75%
○ : 25%

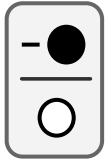
Select the option that describes the same quantum state as:



A.



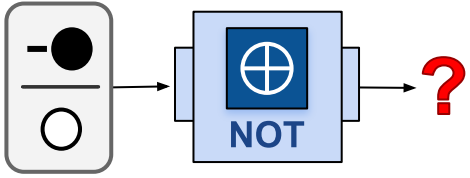
B.

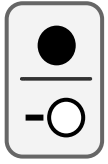


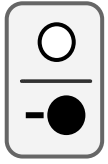
C. ○

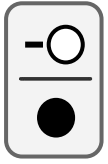
D. ●

Select the option(s) that describe the state of the qubit at ?.



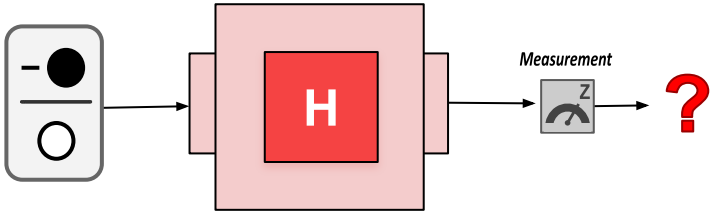
A. 

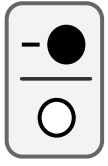
B. 

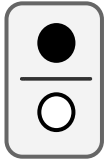
C. 

D.

Select the option(s) that describe the state of the qubit at ?.



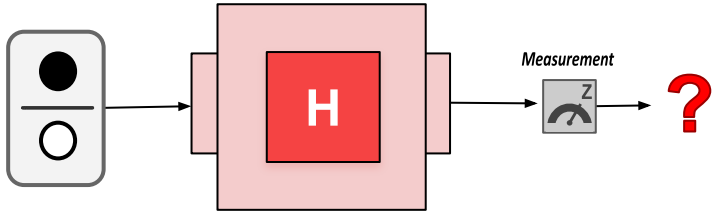
A. 

B. 

C. ○

D. ●

Select the option that describes the probability of each outcome for this circuit (at ?).



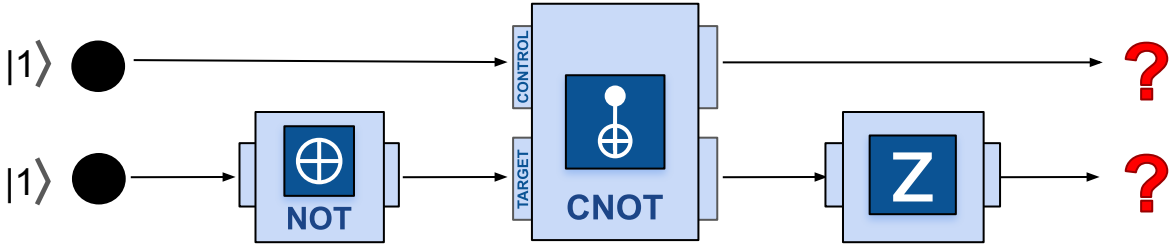
A. ● : 50%
○ : 50%

B. ● : 100%
○ : 0%

C. ● : 0%
○ : 100%

D. ● : 75%
○ : 25%

Homework: Quantum Operations 2



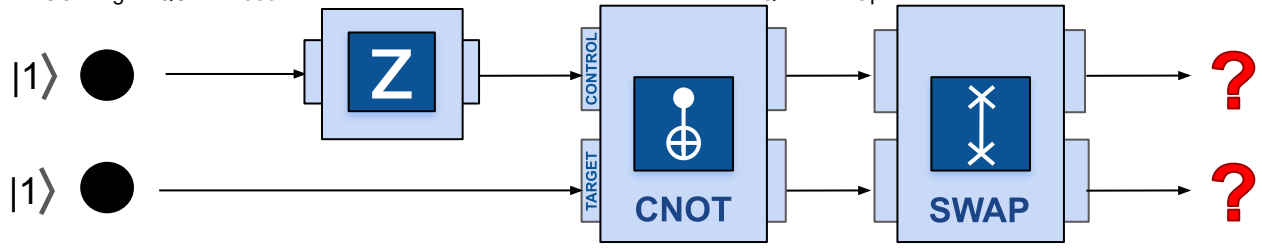
A. $|1\rangle$ ● $|1\rangle$ ●

B. $|1\rangle$ ● $|0\rangle$ ○

C. $|1\rangle$ ● $-|1\rangle$ –●

D. $|1\rangle$ ● $-|0\rangle$ – ○

Homework: Quantum Operations 2



A. $|1\rangle$ ● / $-|1\rangle$ – ●

B. $|1\rangle$ ● / $|0\rangle$ ○

C. $|0\rangle$ ○ / $-|1\rangle$ – ●

D. $|0\rangle$ ○ / $|0\rangle$ ○