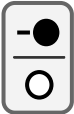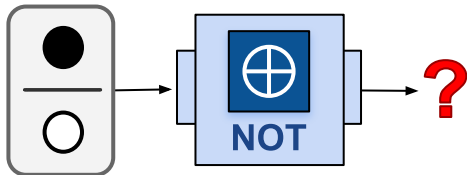# Visual Superposition State: Practice Questions

The H gate ([**H**]) :

a) Entangles two qubits

b) Puts a qubit into superposition

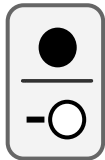c) Performs measurement

d) Toggles the input value (e.g., ○ ⇨ ●)

Visual Superposition

The negative sign (-) in $\boxed{\begin{array}{c} \text{-} \bullet \\ \hline \circ \end{array}}$ indicates the _____.

A. Probability
B. Input
C. Output
D. Phase

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

Visual Superposition

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

Z

?

New!

A.

B.

C.

D.

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

A.

B.

C.

D.

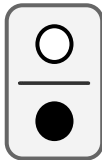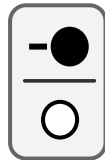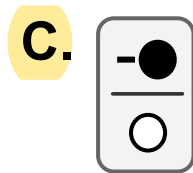Select the option(s) that describe the state of the qubit at **?**.
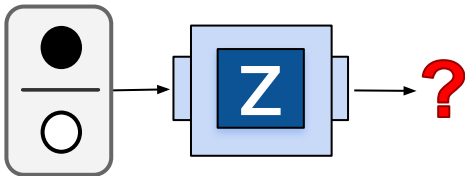
A. **B.** **C.** ○ **D.**
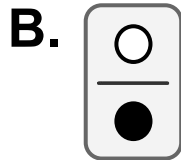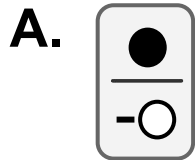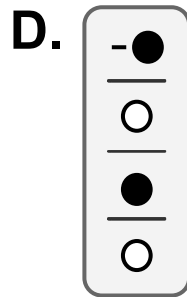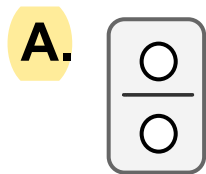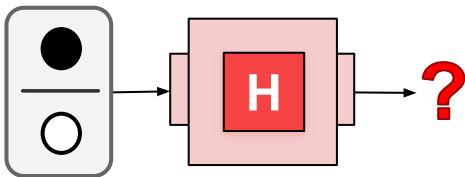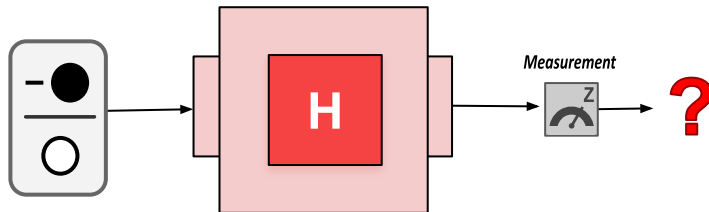
Visual Superposition

Select the option(s) that describe the probability of each outcome for this circuit (at ❓).

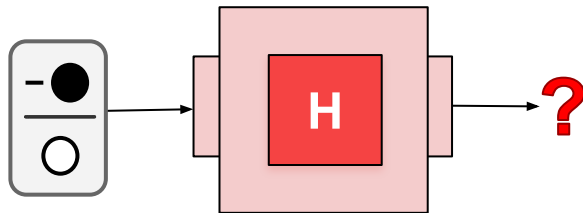**A.** ⚫ : 50%
　　○ : 50%
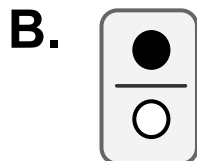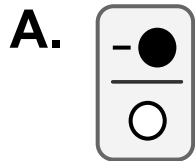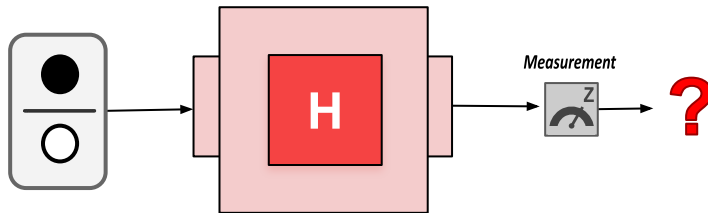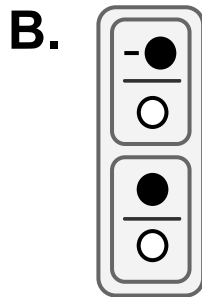
B. ⚫ : 100%
　　○ : 0%

C. ⚫ : 0%
　　○ : 100%

D. ⚫ : 75%
　　○ : 25%

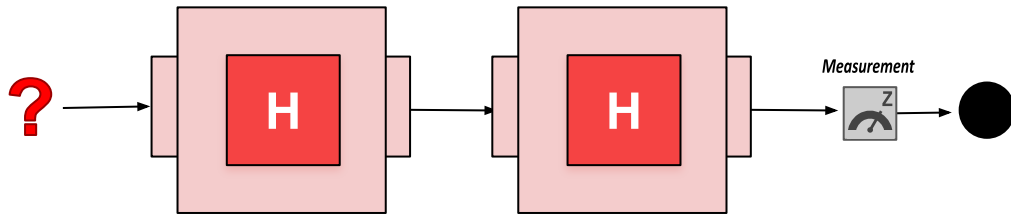Select the option(s) that describe the probability of each outcome for this circuit (at **?**).

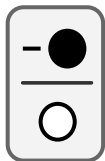**A.** ● : 50%
　　○ : 50%

B. ● : 100%
　　○ : 0%

C. ● : 0%
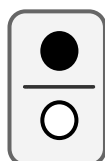　　○ : 100%

D. ● : 75%
　　○ : 25%

Visual Superposition

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

A.

B.

C. ○

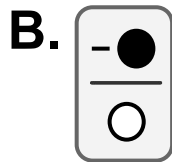**D.** ●

Select the option(s) that describes the same quantum state as:

A.

B.

C.

D.
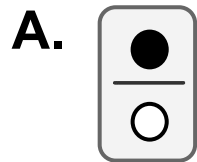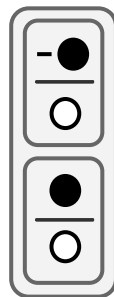
Select the option(s) that describe the probability of each outcome.
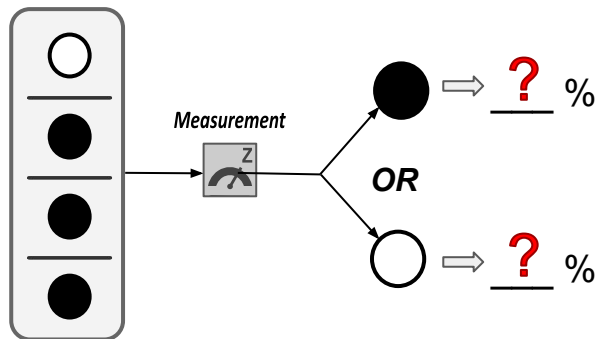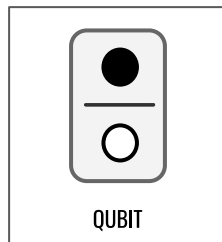

A. ● : 50%
○ : 50%

B. ● : 100%
○ : 0%

C. ● : 25%
○ : 75%

D. ● : 75%
○ : 25%

QUBIT

This visual representation shows a qubit in superposition. (true / false)

There is a 50 % chance of measuring the qubit as ○ . (true / false)