## Week 1 Quiz

## Question 1

What is symbol for the XOR Gate?
A.

C.

D.


## Question 2

What is the Boolean equation for the following logic circuit?


Answer:

$$
F=(A \cdot B)+C
$$

## Question 3

What is the Boolean equation for the following logic circuit?


Answer:

$$
\begin{aligned}
\mathrm{Q}= & {\left[\left(\mathrm{A}^{\prime} \cdot \mathrm{B}^{\prime}\right)^{\prime} \cdot(\mathrm{A} \cdot \mathrm{~B})^{\prime}\right]^{\prime} } \\
= & A \cdot B+A^{\prime} \cdot \mathrm{B}^{\prime} \\
& \text { aka } \mathrm{AXNOR} B
\end{aligned}
$$

## Question 4

The table below is the truth table for XNOR gate. What are the values at P Q R and S?

| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{Y}$ |
| :---: | :---: | :---: |
| 0 | 0 | P |
| 0 | 1 | Q |
| 1 | 0 | R |
| 1 | 1 | S |

Answer: 1, 0, 0, and 1

