Derive Boolean Expression
from Logic Diagram Key

1. $\mathbf{Q} = \overline{\mathbf{C} + (\overline{\mathbf{A}} + \overline{\mathbf{B}})}$

2. $\mathbf{Q} = \overline{(\overline{\mathbf{A}} + \mathbf{B}).\mathbf{C} + (\overline{\mathbf{A}} + \mathbf{B}) + (\mathbf{C} + \overline{\mathbf{D}})}$

3. $\mathbf{Q} = \overline{\mathbf{A}.\overline{\mathbf{B}} + \overline{\mathbf{C}}} + \overline{(\mathbf{A}.\overline{\mathbf{B}}).(\mathbf{D}.\overline{\mathbf{C}})}$

4. $\mathbf{Q} = \overline{(\overline{\mathbf{A}}.\overline{\mathbf{B}}).\mathbf{C}} + \overline{(\overline{\mathbf{A}}.\overline{\mathbf{B}}).(\overline{\mathbf{C}} + \mathbf{D})}$