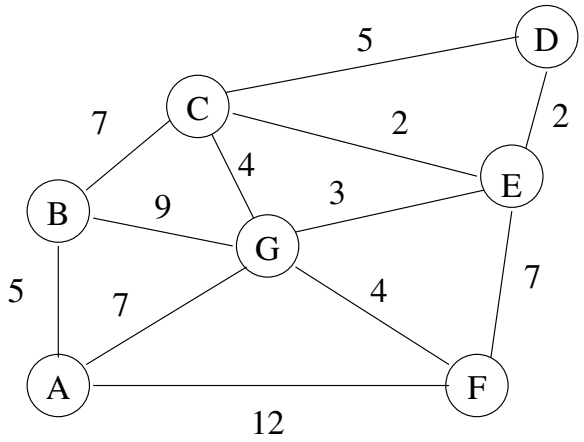
Prim Worksheet



Start with vertex A in a set by itself $T = \{A\}$ and with T_{prim} empty. At each step, choose a vertex not in T that can be joined to a vertex in T using an edge of least cost. Add the vertex to T and the edge to T_{prim}. Show T and T_{prim} at the end of each iteration

I1 $T = \{A, B\}$ $T_{prim} = \{5\}$

I2 $T = \{A, B, G\}$ $T_{prim} = \{5, 7\}$

I3 $T = \{A, B, G, E\}$ $T_{prim} = \{5, 7, 3\}$

I4 $T = \{A, B, G, E, C\}$ $T_{prim} = \{5, 7, 3, 2\}$

I5 $T = \{A, B, G, E, C, D\}$ $T_{prim} = \{5, 7, 3, 2, 2\}$

I6 $T = \{A, B, G, E, C, D, F\}$ $T_{prim} = \{5, 7, 3, 2, 4\}$