# Directions

1. Complete the following steps.
2. Screenshot where directed.
3. Submit to D2L.

# Graph

* Each leter is a node (vertice)
* Each line is an edge
* Ignore the arrows/ Assume each line is bi-directional.

A diagram of a triangle

Description automatically generated with low confidence

# Complete this table

|  |  |  |
| --- | --- | --- |
| Node letter | Connected Node | Edge Cost |
| A  A  A  B  B  B  C  D  E  E  F | F  B  G  F  D  C  D  E  G  F  G | 10  14  17  3  10  9  2  7  1  4  6 |

# Build the **shortest path** from a to each other node

I have done A to B.­­

|  |  |  |
| --- | --- | --- |
| Destination | Route | Total Time Cost |
| B  C  D  E  F  G | af, fb  a->f, f->b, b-> c  a->f, f->e, e->d  a->f, f->e  a->f  a->f, f->e, e->g | 10 + 3 = 13  10 + 3 + 9 = 22  10 + 4 + 7 = 21  10 + 4 = 14  10  10 + 4 + 1 = 15 |

Repeat for c – g­