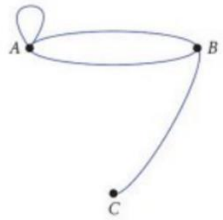
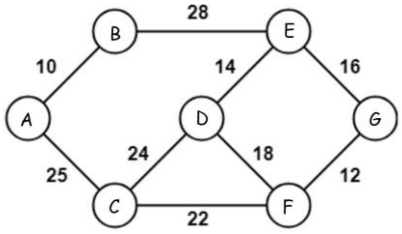
Assess your learning – Networks And Graphs Rate your understanding of this chapter *(be honest!)*	No	Kinda	Yes	Revised for **Week 10 Exam**	Revised for **Week 30 Exam**
I can define and give examples of the key words in this topic. E.g. Explain what is meant by a digraph					
I can multiply 2x2 and 3x3 matrices together. E.g. If R and S are the matrices shown below, find RS: $R = \begin{pmatrix} 1 & 3 & -1 \\ 0 & 2 & 1 \\ -3 & 5 & 2 \end{pmatrix}, S = \begin{pmatrix} 0 & 2 & -2 \\ 1 & -1 & 3 \\ 4 & 0 & 1 \end{pmatrix}$.					
I can write down the adjacency matrix for a given graph/network. E.g. Write down the adjacency matrix for the graph below:  					
I can use an adjacency matrix to write down the number of walks of length n between different nodes. E.g. M is the adjacency matrix for the graph above. Use M^2 to find the number of walks of length 2 from A to C.					
I can use Kruskal's algorithm to find the minimum spanning tree (MST) for a network and write down its weight. E.g. Use Kruskal's Algorithm to find the minimum spanning tree of the network shown below in the next box.					
I can use Prim's algorithm to find the MST for a network and write down its weight. E.g. Use Prim's Algorithm to find the MST of the network shown below.  					
I can use Prim's Algorithm on a distance matrix to find the MST. E.g. Find the MST of the network below: $\begin{array}{c\|cccccc} & P & Q & R & S & T & U \\ \hline P & - & 6 & 3 & - & - & - \\ Q & 6 & - & 5 & 6 & - & 14 \\ R & 3 & 5 & - & 8 & 4 & 10 \\ S & - & 6 & 8 & - & 3 & 8 \\ T & - & - & 4 & 3 & - & - \\ U & - & 14 & 10 & 8 & - & - \end{array}$					
I can explain what a greedy algorithm is.					