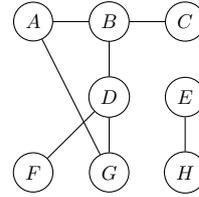
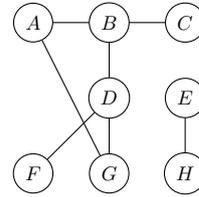
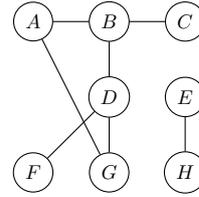
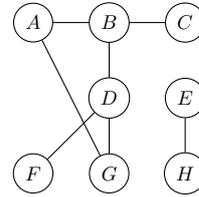
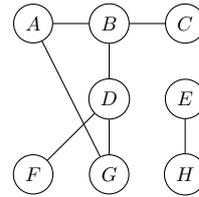
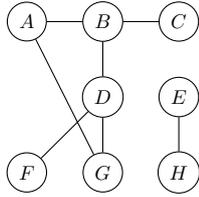
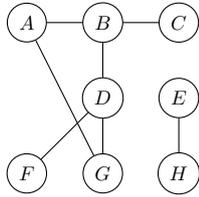
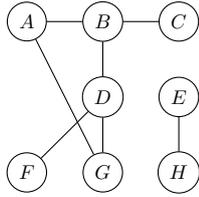
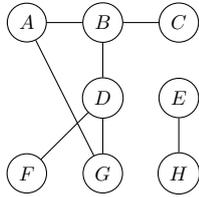
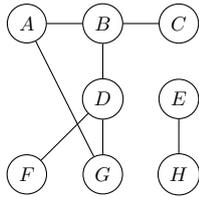
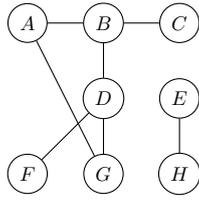
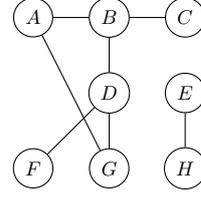
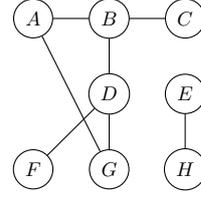
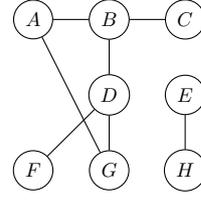
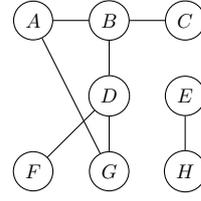
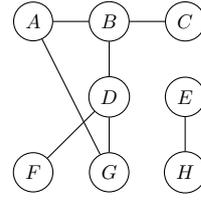
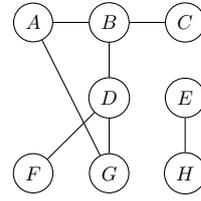
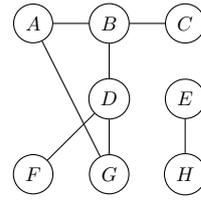
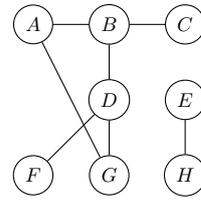
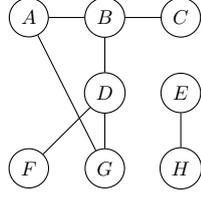
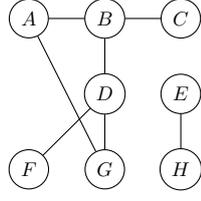
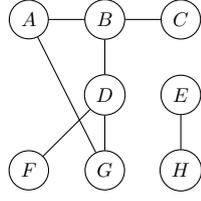
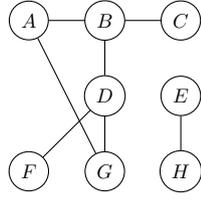
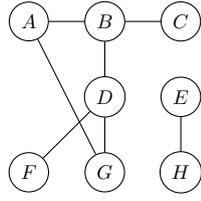
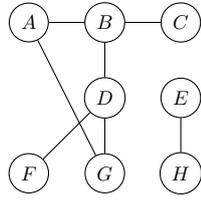
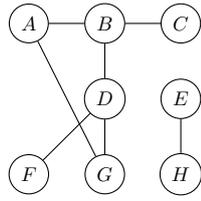
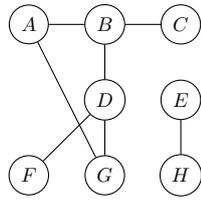


# Graphes

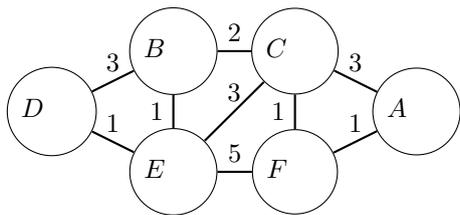
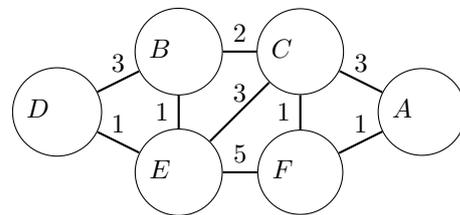
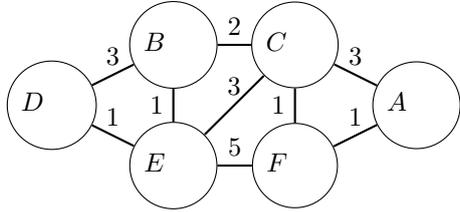
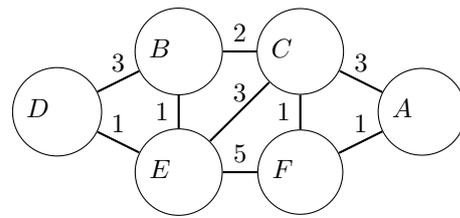
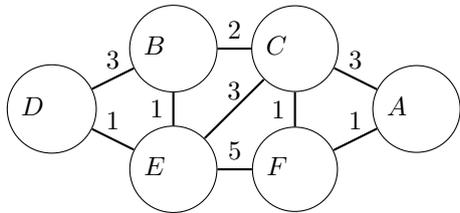
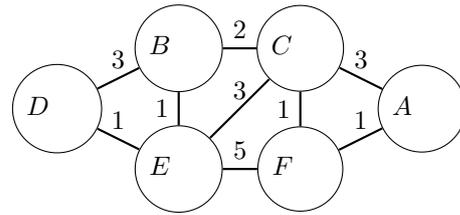
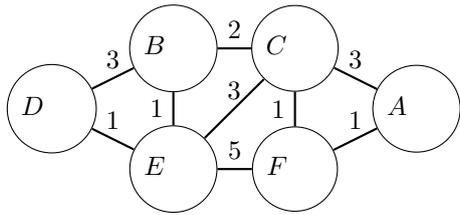
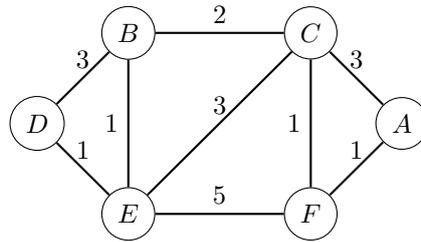
**Exercice 1.** Détailler l'algorithme d'exploration du parcours en largeur pour le graphe suivant à partir du sommet  $A$  :



**Exercice 2.** Détailler l'algorithme d'exploration du parcours en profondeur pour le même graphe  $G$  à partir du sommet  $A$ .



**Exercice 3.** Appliquer l'algorithme de Dijkstra au graphe pondéré suivant, en partant du sommet  $D$  :



**Exercice 4.** Synthétiser les étapes de l'exercice précédent dans un tableau, puis en déduire les plus courts chemins de  $D$  vers  $A$ ,  $E$  et  $B$ .

**Exercice 5.** Synthétiser dans un tableau les étapes données par l'algorithme de Dijkstra, sur le même graphe pondéré mais en partant du sommet  $C$ .

**Exercice 6.** On s'intéresse toujours au même graphe pondéré, pour lequel on souhaite déterminer le chemin le plus court de  $D$  à  $C$ .

1. Déterminer une heuristique adaptée à ce problème.
2. En utilisant l'algorithme  $A^*$  associé dont on récapitulera les étapes dans un tableau, déterminer le chemin le plus court de  $D$  à  $C$ .