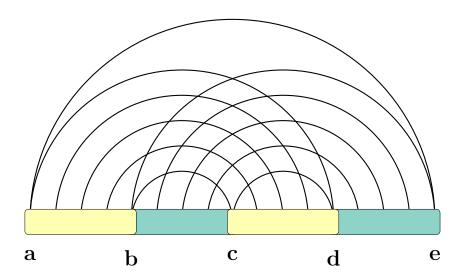
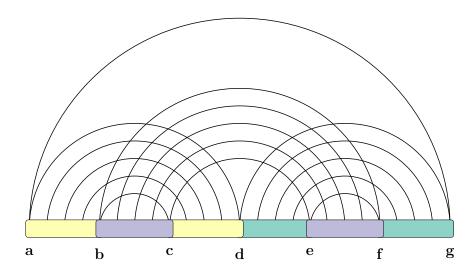
fatgraph name: H



first and last anchors, already given: a,e

$$A = \min_{b,c,d} \left(\begin{array}{|c|c|} \pmb{C}_{\boxtimes} & [a,b,c,d] + \begin{array}{|c|c|} \pmb{C}_{\boxtimes} & [b,c,d,e] \end{array} \right)$$

fatgraph name: K



first and last anchors, already given: a, g

$$A = \min_{d} \left(B \left[d, g | d, a \right] \right)$$

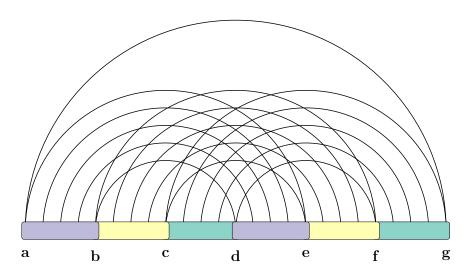
$$B'[d,g|d',a] = \min \begin{cases} B'[d,g-1|d',a], & \text{if } g-1,\notin\{d,d',a\} \\ B[d+1,g-1|d',a] + \Delta G(d,g) & \text{if } \{d+1,g-1\} \cap \{d',a\} = \emptyset \end{cases}$$

$$B[d,g|d',a] = \min \begin{cases} B[d+1,g|d',a], & \text{if } d+1\notin\{g,d',a\} \\ B'[d,g-1|d',a], & \text{if } g-1,\notin\{d,d',a\} \\ B[d+1,g-1|d',a] + \Delta G(d,g) & \text{if } \{d+1,g-1\} \cap \{d',a\} = \emptyset, \end{cases}$$

$$C[d',a|13,25]$$

$$C'[d, a|e, f] = \min \left\{ \begin{array}{ll} C'[d+1, a|e, f], & \text{if } d+1 \notin \{a, e, f\} \\ \hline C[d, a|e, f] = \min \left\{ \begin{array}{ll} C'[d+1, a|e, f], & \text{if } a-1, \notin \{d, e, f\} \\ \hline C'[d+1, a|e, f], & \text{if } d+1 \notin \{a, e, f\} \\ \hline C[d+1, a-1|e, f] + \Delta G(d, a) & \text{if } \{d+1, a-1\} \cap \{e, f\} = \emptyset, \\ \hline C_{\boxtimes}[1, 13, e, f] \end{array} \right.$$

fatgraph name: L

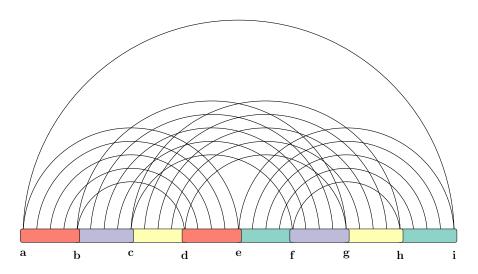


first and last anchors, already given: a,g

$$A = \min_{b,c,d,e,f} \left(\begin{array}{c} C_{\boxtimes} \left[a,b,d,e \right] + B[f,d,c,a] + \begin{array}{c} C_{\boxtimes} \left[b,c,e,f \right] \end{array} \right)$$

$$B\left[a,c,d,f \right] = \min \left(\begin{array}{c} C_{\boxtimes} \left[c,d,f,g \right] \end{array} \right)$$

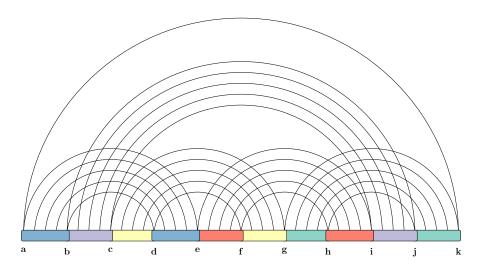
fatgraph name: M



first and last anchors, already given: a, i

$$\begin{split} A &= \min_{e,f,h} \left(\boxed{\textbf{\textit{C}}_{\boxtimes}} \left[e,f,h,i \right] + B[h,f,e,a] \right) \\ \\ B \left[a,e,f,h \right] &= \min_{b,d} \left(C[f,b,d,h] + \boxed{\textbf{\textit{C}}_{\boxtimes}} \left[a,b,d,e \right] \right) \\ \\ C \left[b,d,f,h \right] &= \min_{c,g} \left(\boxed{\textbf{\textit{C}}_{\boxtimes}} \left[c,d,g,h \right] + \boxed{\textbf{\textit{C}}_{\boxtimes}} \left[b,c,f,g \right] \right) \end{split}$$

fatgraph name: C5



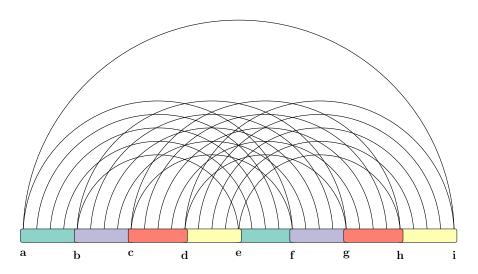
first and last anchors, already given: a, k

$$A = \min_{e,f,g,h,i,j} \left(\begin{array}{c} \textbf{\textit{B}} \left[e,a|i,f,j,g \right] + D[h,j,a,g] + \begin{array}{c} \textbf{\textit{C}}_{\boxtimes} \left[e,f,h,i \right] \end{array} \right)$$

$$\textbf{\textit{B}}' \left[e,a|i,f,j,g \right] = \min \left\{ \begin{array}{c} \textbf{\textit{B}}' \left[e+1,a|i,f,j,g \right], & \text{if } e+1 \notin \{a,i,f,j,g\} \\ \\ \textbf{\textit{B}} \left[e,a-1|i,f,j,g \right], & \text{if } a-1, \notin \{e,i,f,j,g\} \\ \\ \textbf{\textit{B}}' \left[e+1,a|i,f,j,g \right], & \text{if } e+1 \notin \{a,i,f,j,g\} \\ \\ \textbf{\textit{B}} \left[e+1,a-1|i,f,j,g \right] + \Delta G(e,a) & \text{if } \{e+1,a-1\} \cap \{i,f,j,g\} = \emptyset, \\ \\ C[17,g,1,f,j,i] & \\ \\ C\left[b,d,f,g,i,j \right] = \min_{c} \left(\begin{array}{c} \textbf{\textit{C}}_{\boxtimes} \left[c,d,f,g \right] + \begin{array}{c} \textbf{\textit{C}}_{\boxtimes} \left[b,c,i,j \right] \end{array} \right)$$

$$D\left[a,g,h,j \right] = \min \left(\begin{array}{c} \textbf{\textit{C}}_{\boxtimes} \left[g,h,j,k \right] \right)$$

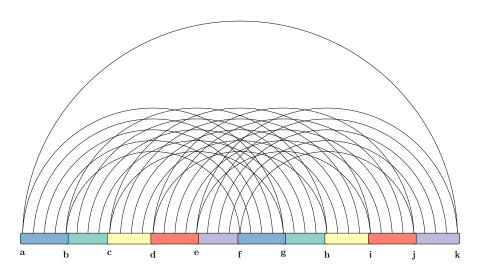
fatgraph name: K4



first and last anchors, already given: a, i

$$\begin{split} A &= \min_{b,c,e,f,g} \left(B[g,e,c,a] + \boxed{C_{\boxtimes}} \left[a,b,e,f \right] + \boxed{C_{\boxtimes}} \left[b,c,f,g \right] \right) \\ &B\left[a,c,e,g \right] = \min_{d,h} \left(C[d,h,e,a] + \boxed{C_{\boxtimes}} \left[c,d,g,h \right] \right) \\ &C\left[a,d,e,h \right] = \min \left(\boxed{C_{\boxtimes}} \left[d,e,h,i \right] \right) \end{split}$$

fatgraph name: K5



first and last anchors, already given: a,k

$$\begin{split} A &= \min_{b,d,f,g,i} \left(B[d,f,a,i] + \frac{C_{\boxtimes}}{C_{\boxtimes}} [a,b,f,g] + D[d,g,i,b] \right) \\ B &[a,d,f,i] = \min_{e,j} \left(\frac{C_{\boxtimes}}{C_{\boxtimes}} [d,e,i,j] + C[f,j,e,a] \right) \\ C &[a,e,f,j] = \min \left(\frac{C_{\boxtimes}}{C_{\boxtimes}} [e,f,j,k] \right) \\ D &[b,d,g,i] = \min_{c,h} \left(\frac{C_{\boxtimes}}{C_{\boxtimes}} [b,c,g,h] + \frac{C_{\boxtimes}}{C_{\boxtimes}} [c,d,h,i] \right) \end{split}$$