a (1)    b (5)    c (6)    d (10)    e (11)    f (15)    g (16)    h (20)    i (21)    j (25)    k (26)    l (30)
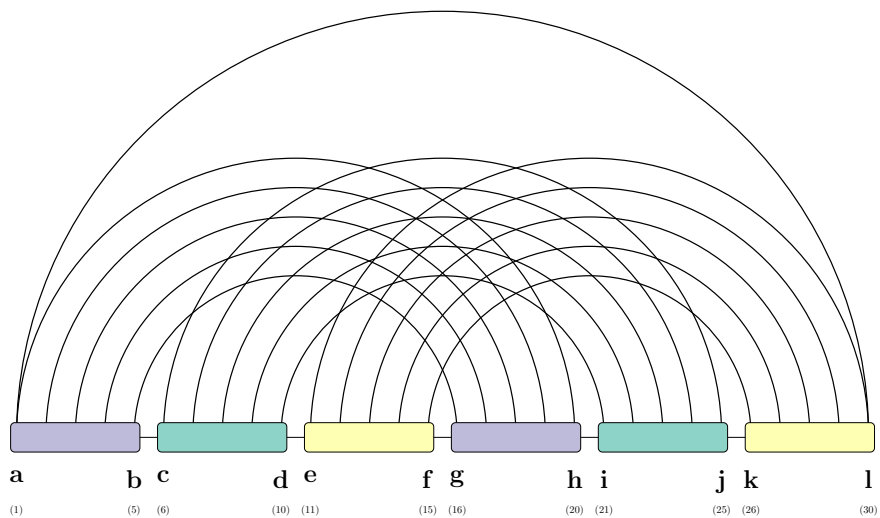
**fatgraph name: L**



first and last anchors, already given: $a, l$

$$A = \min_{d,f,k} \left( B[d, a, k, f] + G[d, l, k, f] \right)$$

$$B\left[a, d, f, k\right] = \min_{g} \left( C[d, g, k, a] \right)$$

$$C\left[a, d, g, k\right] = \min_{b,h} \left( \boxed{C_{\boxtimes}}\left[a, b, g, h\right] + D[d, h, b, k] \right)$$

$$D\left[b, d, h, k\right] = \min_{c} \left( E[d, c, h, k] \right)$$

$$E\left[c, d, h, k\right] = \min_{j} \left( F[d, c, h, j] \right)$$

$$F\left[c, d, h, j\right] = \min_{i} \left( \boxed{C_{\boxtimes}}\left[c, d, i, j\right] \right)$$

$$G\left[d, f, k, l\right] = \min_{e} \left( \boxed{C_{\boxtimes}}\left[e, f, k, l\right] \right)$$

1

```
1 10 15 26 30            [ ]

10 11 15 26 30        1 10 15 16 26

H1 (11-15-26-30) (clique)          1 10 16 20 26 5

30 12 11              H2 (1-5-16-20) (clique)
26 15
                      2 1 20          10 20 26 5 6
12 30 29              16 5
26 15
                      19 2 20         10 20 25 26 6
12 13 29              16 5
26 15
                      3 19 2          10 20 21 25 6
28 13 29              16 5
26 15
                      18 3 19         H0 (6-10-21-25) (clique)
14 28 13              16 5
26 15                                 7 6 25
                      18 3 4          10 21
27 28 14              16 5
26 15                                 7 25 24
                      18 4 17         10 21
                      16 5
                                      7 8 24
                                      10 21

                                      8 24 23
                                      10 21

                                      8 23 9
                                      10 21

                                      9 23 22
                                      10 21
```

```
                    ┌──────┐
                    │  -1  │
                    └──────┘
                        │
                        ▼
              ┌─────────────────────┐
              │ A  1   10   15   26 │
              └─────────────────────┘
                  │              │
                  ▼              ▼
      ┌──────────────────┐   ┌──────────────────┐
      │ I 10  11  15 26  │   │ B 1 10 15   16   │
      └──────────────────┘   └──────────────────┘
                  │                      │
                  ▼                      ▼
```

H1 (11-15-26-30) (diag)

| J 26 15 |
|---------|
| 26 15   |

|  11 30  |
|---------|
| 26 15   |

C 1 10 16  20  26

H2 (1-5-16-20) (diag)

| D 20 1 |
|--------|
|   16   |

|  5 16  |
|--------|
|   16   |

E 10 20 26  5

F 10 20  25 26

G 10 20  21 25

H0 (6-10-21-25) (diag)

| H 10 21     |
|-------------|
| 6 25 10 21  |

| 6 10 21 25 |