

1.

current = 1

$$U = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11\}$$

$$D = [\infty, \infty, \dots] \leftarrow \text{all } \infty$$

$$V = \{ \}$$

2. current = 7

$$U = \{2, 3, 4, 5, 6, 7, 8, 9, 10, 11\}$$

$$D = [0, \infty, \infty, 13, \infty, \infty, 2, \infty, \infty, \infty, \infty]$$

$$V = \{13\}$$

3. current = 10

$$U = \{2, 3, 4, 5, 6, 8, 9, 10, 11\}$$

$$D = [0, \infty, \infty, 13, \infty, 19, \frac{2}{\infty}, \infty, \infty, 10, \infty]$$

$$V = \{1, 7\}$$

4. current = 4

$$U = \{2, 3, 4, 5, 6, 8, 9, 11\}$$

$$D = [0, \infty, \infty, 13, \infty, 19, 2, \infty, 20, 10, \infty]$$

$$V = \{1, 7, 10\}$$

5. current = 6

$$U = \{2, 3, 5, 6, 8, 9, 11\}$$

$$D = [\text{same}]$$

$$V = \{1, 7, 10, 4\}$$

6. current = 9

$$U = \{2, 3, 5, 8, 9, 11\}$$

$$D = [0, \infty, 30, \overset{13}{\infty}, 19, 2, \infty, 20, 10, \infty]$$

$$V = \{1, 7, 10, 4, 6\}$$

7. current = 3

$$U = \{2, 3, 5, 8, 11\}$$

$$D = [0, \infty, 30, 13, 35, 19, 2, \infty, 20, 10, \infty]$$

$$V = \{1, 7, 10, 4, 6, 9\}$$

8. current = 2

$$U = \{2, 5, 8, 11\}$$

$$D = [0, 32, 30, 13, 35, 19, 2, \infty, 20, 10, \infty]$$

$$V = \{1, 7, 10, 4, 6, 9, 3\}$$

9. current = 5

$$U = \{5, 8, 11\}$$

$$D = [0, 32, 30, 13, 35, 19, 2, \infty, 20, 10, \infty]$$

$$V = \{1, 7, 10, 4, 6, 9, 3, 2\}$$

10. current = 8

$$U = \{8, 11\}$$

$$D = [0, 32, 30, 13, 35, 19, 2, 49, 20, 10, \infty]$$

$$V = \{1, 7, 10, 4, 6, 9, 3, 2, 5\}$$

11. current = 11

$$U = \{11\}$$

$$D = [0, 32, 30, 13, 35, 19, 2, 49, 20, 10, 55]$$

$$V = \{1, 7, 10, 4, 6, 9, 3, 2, 5, 8\}$$

$$U = \{ \}$$

D = same

$$V = \{1, 7, 10, 4, 6, 9, 3, 2, 5, 8, 11\}$$