

Vertical

Horizontal

\ Diagonal

/ Diagonal

No Edge

1	49	91
1	47	89
3	46	92

2	1	1
43	47	46
94	92	91

50	93	91
3	47	89
1	2	46

91	93	50
89	47	3
46	2	1

69	73	65
67	70	69
65	65	66

$$\frac{\partial f}{\partial x} = 355$$

$$\frac{\partial f}{\partial x} = 2$$

$$\frac{\partial f}{\partial x} = 258$$

$$\frac{\partial f}{\partial x} = -258$$

$$\frac{\partial f}{\partial x} = 1$$

$$\frac{\partial f}{\partial y} = 3$$

$$\frac{\partial f}{\partial y} = -364$$

$$\frac{\partial f}{\partial y} = 276$$

$$\frac{\partial f}{\partial y} = 276$$

$$\frac{\partial f}{\partial y} = 19$$

$$\theta = 0^\circ$$

$$\theta = -90^\circ$$

$$\theta = 45^\circ$$

$$\theta = -45^\circ$$

$$\theta = 87^\circ$$

$$\|\nabla f\| = 179$$

$$\|\nabla f\| = 183$$

$$\|\nabla f\| = 267$$

$$\|\nabla f\| = 267$$

$$\|\nabla f\| = 10$$