Test 2 20x20

Original Map

s 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 1 0

0 1 1 0 0 0 0 1 0 0 0 1 1 0 0 0 0 1 0 0

0 0 1 0 1 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0

0 0 1 0 1 0 0 0 0 0 0 0 1 0 1 0 0 0 0 0

0 0 1 0 0 0 1 1 0 0 0 0 1 0 0 0 0 1 0 0

0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 1 0 0 0

0 1 1 0 0 0 1 0 0 0 0 1 0 0 0 0 1 0 0 0

0 0 0 1 0 0 0 0 0 1 0 0 0 1 0 0 0 0 0 0

0 0 0 1 0 0 0 1 1 0 1 0 0 1 0 0 0 1 0 0

0 0 1 0 0 1 0 1 1 0 0 0 1 0 0 1 0 0 1 0

0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 1 0

0 1 1 0 0 0 1 1 1 0 0 1 1 0 0 0 0 1 0 0

0 0 1 0 1 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0

0 0 1 0 1 0 0 0 0 0 1 0 1 0 0 0 0 0 0 0

0 0 0 0 0 0 1 1 0 0 0 0 0 0 0 0 1 1 0 0

0 0 0 0 0 0 1 0 0 1 0 0 0 0 0 0 1 0 0 0

0 1 1 0 0 0 1 0 0 0 0 1 1 0 0 0 1 0 0 0

0 0 0 1 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0

0 0 0 1 0 0 0 1 1 0 1 0 0 1 0 0 0 1 1 0

0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 1 0 e 1 0

Added in new antGroup 0

A1 trails count: 44 A2 trails count: 40 A3 trails count: 38 A4 trails count: 48 A5 trails count: 38 A6 trails count: 42 A7 trails count: 40 A8 trails count: 44 A9 trails count: 42 A10 trails count: 58

Ant Trail Min Size is: 38 Found at Ant3

Best Ant has size: 38, and has a path of:

s 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 1 0

x 1 1 0 0 0 0 1 0 0 0 1 1 0 0 0 0 1 0 0

x 0 1 0 1 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0

x 0 1 0 1 0 0 0 0 0 0 0 1 0 1 0 0 0 0 0

x x 1 0 0 0 1 1 0 0 0 0 1 0 0 0 0 1 0 0

0 x x x 0 0 1 0 0 0 0 0 0 0 0 0 1 0 0 0

0 1 1 x x 0 1 0 0 0 0 1 0 0 0 0 1 0 0 0

0 0 0 1 x x x 0 0 1 0 0 0 1 0 0 0 0 0 0

0 0 0 1 0 0 x 1 1 0 1 0 0 1 0 0 0 1 0 0

0 0 1 0 0 1 x 1 1 0 0 0 1 0 0 1 0 0 1 0

0 0 0 0 0 x x 0 1 0 0 0 0 0 0 0 0 0 1 0

0 1 1 0 0 x 1 1 1 0 0 1 1 0 0 0 0 1 0 0

0 0 1 0 1 x x x 0 0 0 0 0 1 0 0 0 0 0 0

0 0 1 0 1 0 0 x x x 1 0 1 0 0 0 0 0 0 0

0 0 0 0 0 0 1 1 0 x x x 0 0 0 0 1 1 0 0

0 0 0 0 0 0 1 0 0 1 0 x x x x 0 1 0 0 0

0 1 1 0 0 0 1 0 0 0 0 1 1 0 x x 1 0 0 0

0 0 0 1 0 0 0 0 0 0 0 0 0 1 0 x x 0 0 0

0 0 0 1 0 0 0 1 1 0 1 0 0 1 0 0 x 1 1 0

0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 1 x e 1 0

Added in new antGroup 1

A1 trails count: 58 A2 trails count: 68 A3 trails count: 38 A4 trails count: 156 A5 trails count: 40 A6 trails count: 210 A7 trails count: 96 A8 trails count: 52 A9 trails count: 40 A10 trails count: 86

Ant Trail Min Size is: 38 Found at Ant3

Best Ant has size: 38, and has a path of:

s 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 1 0

x 1 1 0 0 0 0 1 0 0 0 1 1 0 0 0 0 1 0 0

x 0 1 0 1 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0

x 0 1 0 1 0 0 0 0 0 0 0 1 0 1 0 0 0 0 0

x x 1 0 0 0 1 1 0 0 0 0 1 0 0 0 0 1 0 0

0 x x x 0 0 1 0 0 0 0 0 0 0 0 0 1 0 0 0

0 1 1 x x 0 1 0 0 0 0 1 0 0 0 0 1 0 0 0

0 0 0 1 x x x 0 0 1 0 0 0 1 0 0 0 0 0 0

0 0 0 1 0 0 x 1 1 0 1 0 0 1 0 0 0 1 0 0

0 0 1 0 0 1 x 1 1 0 0 0 1 0 0 1 0 0 1 0

0 0 0 0 0 x x 0 1 0 0 0 0 0 0 0 0 0 1 0

0 1 1 0 0 x 1 1 1 0 0 1 1 0 0 0 0 1 0 0

0 0 1 0 1 x x x 0 0 0 0 0 1 0 0 0 0 0 0

0 0 1 0 1 0 0 x x x 1 0 1 0 0 0 0 0 0 0

0 0 0 0 0 0 1 1 0 x x x 0 0 0 0 1 1 0 0

0 0 0 0 0 0 1 0 0 1 0 x x x x 0 1 0 0 0

0 1 1 0 0 0 1 0 0 0 0 1 1 0 x x 1 0 0 0

0 0 0 1 0 0 0 0 0 0 0 0 0 1 0 x x 0 0 0

0 0 0 1 0 0 0 1 1 0 1 0 0 1 0 0 x 1 1 0

0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 1 x e 1 0

Added in new antGroup 2

A1 trails count: 38 A2 trails count: 94 A3 trails count: 44 A4 trails count: 64 A5 trails count: 38 A6 trails count: 72 A7 trails count: 66 A8 trails count: 40 A9 trails count: 50 A10 trails count: 50

Ant Trail Min Size is: 38 Found at Ant3

Best Ant has size: 38, and has a path of:

s 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 1 0

x 1 1 0 0 0 0 1 0 0 0 1 1 0 0 0 0 1 0 0

x 0 1 0 1 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0

x 0 1 0 1 0 0 0 0 0 0 0 1 0 1 0 0 0 0 0

x x 1 0 0 0 1 1 0 0 0 0 1 0 0 0 0 1 0 0

0 x x x 0 0 1 0 0 0 0 0 0 0 0 0 1 0 0 0

0 1 1 x x 0 1 0 0 0 0 1 0 0 0 0 1 0 0 0

0 0 0 1 x x x 0 0 1 0 0 0 1 0 0 0 0 0 0

0 0 0 1 0 0 x 1 1 0 1 0 0 1 0 0 0 1 0 0

0 0 1 0 0 1 x 1 1 0 0 0 1 0 0 1 0 0 1 0

0 0 0 0 0 x x 0 1 0 0 0 0 0 0 0 0 0 1 0

0 1 1 0 0 x 1 1 1 0 0 1 1 0 0 0 0 1 0 0

0 0 1 0 1 x x x 0 0 0 0 0 1 0 0 0 0 0 0

0 0 1 0 1 0 0 x x x 1 0 1 0 0 0 0 0 0 0

0 0 0 0 0 0 1 1 0 x x x 0 0 0 0 1 1 0 0

0 0 0 0 0 0 1 0 0 1 0 x x x x 0 1 0 0 0

0 1 1 0 0 0 1 0 0 0 0 1 1 0 x x 1 0 0 0

0 0 0 1 0 0 0 0 0 0 0 0 0 1 0 x x 0 0 0

0 0 0 1 0 0 0 1 1 0 1 0 0 1 0 0 x 1 1 0

0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 1 x e 1 0

Added in new antGroup 3

A1 trails count: 70 A2 trails count: 52 A3 trails count: 68 A4 trails count: 52 A5 trails count: 80 A6 trails count: 58 A7 trails count: 66 A8 trails count: 36 A9 trails count: 40 A10 trails count: 50

Ant Trail Min Size is: 36 Found at Ant38

Best Ant has size: 36, and has a path of:

s 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 1 0

x 1 1 0 0 0 0 1 0 0 0 1 1 0 0 0 0 1 0 0

x x 1 0 1 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0

0 x 1 0 1 0 0 0 0 0 0 0 1 0 1 0 0 0 0 0

0 x 1 0 0 0 1 1 0 0 0 0 1 0 0 0 0 1 0 0

0 x x x 0 0 1 0 0 0 0 0 0 0 0 0 1 0 0 0

0 1 1 x x 0 1 0 0 0 0 1 0 0 0 0 1 0 0 0

0 0 0 1 x 0 0 0 0 1 0 0 0 1 0 0 0 0 0 0

0 0 0 1 x 0 0 1 1 0 1 0 0 1 0 0 0 1 0 0

0 0 1 0 x 1 0 1 1 0 0 0 1 0 0 1 0 0 1 0

0 0 0 0 x 0 0 0 1 0 0 0 0 0 0 0 0 0 1 0

0 1 1 0 x x 1 1 1 0 0 1 1 0 0 0 0 1 0 0

0 0 1 0 1 x x x x 0 0 0 0 1 0 0 0 0 0 0

0 0 1 0 1 0 0 0 x x 1 0 1 0 0 0 0 0 0 0

0 0 0 0 0 0 1 1 0 x x 0 0 0 0 0 1 1 0 0

0 0 0 0 0 0 1 0 0 1 x x x x 0 0 1 0 0 0

0 1 1 0 0 0 1 0 0 0 0 1 1 x x x 1 0 0 0

0 0 0 1 0 0 0 0 0 0 0 0 0 1 0 x 0 0 0 0

0 0 0 1 0 0 0 1 1 0 1 0 0 1 0 x x 1 1 0

0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 1 x e 1 0

Added in new antGroup 4

A1 trails count: 46 A2 trails count: 56 A3 trails count: 46 A4 trails count: 48 A5 trails count: 56 A6 trails count: 52 A7 trails count: 56 A8 trails count: 64 A9 trails count: 58 A10 trails count: 238

Ant Trail Min Size is: 36 Found at Ant38

Best Ant has size: 36, and has a path of:

s 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 1 0

x 1 1 0 0 0 0 1 0 0 0 1 1 0 0 0 0 1 0 0

x x 1 0 1 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0

0 x 1 0 1 0 0 0 0 0 0 0 1 0 1 0 0 0 0 0

0 x 1 0 0 0 1 1 0 0 0 0 1 0 0 0 0 1 0 0

0 x x x 0 0 1 0 0 0 0 0 0 0 0 0 1 0 0 0

0 1 1 x x 0 1 0 0 0 0 1 0 0 0 0 1 0 0 0

0 0 0 1 x 0 0 0 0 1 0 0 0 1 0 0 0 0 0 0

0 0 0 1 x 0 0 1 1 0 1 0 0 1 0 0 0 1 0 0

0 0 1 0 x 1 0 1 1 0 0 0 1 0 0 1 0 0 1 0

0 0 0 0 x 0 0 0 1 0 0 0 0 0 0 0 0 0 1 0

0 1 1 0 x x 1 1 1 0 0 1 1 0 0 0 0 1 0 0

0 0 1 0 1 x x x x 0 0 0 0 1 0 0 0 0 0 0

0 0 1 0 1 0 0 0 x x 1 0 1 0 0 0 0 0 0 0

0 0 0 0 0 0 1 1 0 x x 0 0 0 0 0 1 1 0 0

0 0 0 0 0 0 1 0 0 1 x x x x 0 0 1 0 0 0

0 1 1 0 0 0 1 0 0 0 0 1 1 x x x 1 0 0 0

0 0 0 1 0 0 0 0 0 0 0 0 0 1 0 x 0 0 0 0

0 0 0 1 0 0 0 1 1 0 1 0 0 1 0 x x 1 1 0

0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 1 x e 1 0

Added in new antGroup 5

A1 trails count: 42 A2 trails count: 44 A3 trails count: 50 A4 trails count: 54 A5 trails count: 188 A6 trails count: 54 A7 trails count: 54 A8 trails count: 38 A9 trails count: 52 A10 trails count: 38

Ant Trail Min Size is: 36 Found at Ant38

Best Ant has size: 36, and has a path of:

s 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 1 0

x 1 1 0 0 0 0 1 0 0 0 1 1 0 0 0 0 1 0 0

x x 1 0 1 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0

0 x 1 0 1 0 0 0 0 0 0 0 1 0 1 0 0 0 0 0

0 x 1 0 0 0 1 1 0 0 0 0 1 0 0 0 0 1 0 0

0 x x x 0 0 1 0 0 0 0 0 0 0 0 0 1 0 0 0

0 1 1 x x 0 1 0 0 0 0 1 0 0 0 0 1 0 0 0

0 0 0 1 x 0 0 0 0 1 0 0 0 1 0 0 0 0 0 0

0 0 0 1 x 0 0 1 1 0 1 0 0 1 0 0 0 1 0 0

0 0 1 0 x 1 0 1 1 0 0 0 1 0 0 1 0 0 1 0

0 0 0 0 x 0 0 0 1 0 0 0 0 0 0 0 0 0 1 0

0 1 1 0 x x 1 1 1 0 0 1 1 0 0 0 0 1 0 0

0 0 1 0 1 x x x x 0 0 0 0 1 0 0 0 0 0 0

0 0 1 0 1 0 0 0 x x 1 0 1 0 0 0 0 0 0 0

0 0 0 0 0 0 1 1 0 x x 0 0 0 0 0 1 1 0 0

0 0 0 0 0 0 1 0 0 1 x x x x 0 0 1 0 0 0

0 1 1 0 0 0 1 0 0 0 0 1 1 x x x 1 0 0 0

0 0 0 1 0 0 0 0 0 0 0 0 0 1 0 x 0 0 0 0

0 0 0 1 0 0 0 1 1 0 1 0 0 1 0 x x 1 1 0

0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 1 x e 1 0

Added in new antGroup 6

A1 trails count: 38 A2 trails count: 38 A3 trails count: 292 A4 trails count: 94 A5 trails count: 64 A6 trails count: 56 A7 trails count: 68 A8 trails count: 184 A9 trails count: 70 A10 trails count: 40

Ant Trail Min Size is: 36 Found at Ant38

Best Ant has size: 36, and has a path of:

s 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 1 0

x 1 1 0 0 0 0 1 0 0 0 1 1 0 0 0 0 1 0 0

x x 1 0 1 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0

0 x 1 0 1 0 0 0 0 0 0 0 1 0 1 0 0 0 0 0

0 x 1 0 0 0 1 1 0 0 0 0 1 0 0 0 0 1 0 0

0 x x x 0 0 1 0 0 0 0 0 0 0 0 0 1 0 0 0

0 1 1 x x 0 1 0 0 0 0 1 0 0 0 0 1 0 0 0

0 0 0 1 x 0 0 0 0 1 0 0 0 1 0 0 0 0 0 0

0 0 0 1 x 0 0 1 1 0 1 0 0 1 0 0 0 1 0 0

0 0 1 0 x 1 0 1 1 0 0 0 1 0 0 1 0 0 1 0

0 0 0 0 x 0 0 0 1 0 0 0 0 0 0 0 0 0 1 0

0 1 1 0 x x 1 1 1 0 0 1 1 0 0 0 0 1 0 0

0 0 1 0 1 x x x x 0 0 0 0 1 0 0 0 0 0 0

0 0 1 0 1 0 0 0 x x 1 0 1 0 0 0 0 0 0 0

0 0 0 0 0 0 1 1 0 x x 0 0 0 0 0 1 1 0 0

0 0 0 0 0 0 1 0 0 1 x x x x 0 0 1 0 0 0

0 1 1 0 0 0 1 0 0 0 0 1 1 x x x 1 0 0 0

0 0 0 1 0 0 0 0 0 0 0 0 0 1 0 x 0 0 0 0

0 0 0 1 0 0 0 1 1 0 1 0 0 1 0 x x 1 1 0

0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 1 x e 1 0

Added in new antGroup 7

A1 trails count: 68 A2 trails count: 62 A3 trails count: 48 A4 trails count: 52 A5 trails count: 46 A6 trails count: 48 A7 trails count: 52 A8 trails count: 78 A9 trails count: 178 A10 trails count: 46

Ant Trail Min Size is: 36 Found at Ant38

Best Ant has size: 36, and has a path of:

s 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 1 0

x 1 1 0 0 0 0 1 0 0 0 1 1 0 0 0 0 1 0 0

x x 1 0 1 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0

0 x 1 0 1 0 0 0 0 0 0 0 1 0 1 0 0 0 0 0

0 x 1 0 0 0 1 1 0 0 0 0 1 0 0 0 0 1 0 0

0 x x x 0 0 1 0 0 0 0 0 0 0 0 0 1 0 0 0

0 1 1 x x 0 1 0 0 0 0 1 0 0 0 0 1 0 0 0

0 0 0 1 x 0 0 0 0 1 0 0 0 1 0 0 0 0 0 0

0 0 0 1 x 0 0 1 1 0 1 0 0 1 0 0 0 1 0 0

0 0 1 0 x 1 0 1 1 0 0 0 1 0 0 1 0 0 1 0

0 0 0 0 x 0 0 0 1 0 0 0 0 0 0 0 0 0 1 0

0 1 1 0 x x 1 1 1 0 0 1 1 0 0 0 0 1 0 0

0 0 1 0 1 x x x x 0 0 0 0 1 0 0 0 0 0 0

0 0 1 0 1 0 0 0 x x 1 0 1 0 0 0 0 0 0 0

0 0 0 0 0 0 1 1 0 x x 0 0 0 0 0 1 1 0 0

0 0 0 0 0 0 1 0 0 1 x x x x 0 0 1 0 0 0

0 1 1 0 0 0 1 0 0 0 0 1 1 x x x 1 0 0 0

0 0 0 1 0 0 0 0 0 0 0 0 0 1 0 x 0 0 0 0

0 0 0 1 0 0 0 1 1 0 1 0 0 1 0 x x 1 1 0

0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 1 x e 1 0

Added in new antGroup 8

A1 trails count: 88 A2 trails count: 46 A3 trails count: 60 A4 trails count: 56 A5 trails count: 70 A6 trails count: 106 A7 trails count: 92 A8 trails count: 42 A9 trails count: 92 A10 trails count: 54

Ant Trail Min Size is: 36 Found at Ant38

Best Ant has size: 36, and has a path of:

s 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 1 0

x 1 1 0 0 0 0 1 0 0 0 1 1 0 0 0 0 1 0 0

x x 1 0 1 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0

0 x 1 0 1 0 0 0 0 0 0 0 1 0 1 0 0 0 0 0

0 x 1 0 0 0 1 1 0 0 0 0 1 0 0 0 0 1 0 0

0 x x x 0 0 1 0 0 0 0 0 0 0 0 0 1 0 0 0

0 1 1 x x 0 1 0 0 0 0 1 0 0 0 0 1 0 0 0

0 0 0 1 x 0 0 0 0 1 0 0 0 1 0 0 0 0 0 0

0 0 0 1 x 0 0 1 1 0 1 0 0 1 0 0 0 1 0 0

0 0 1 0 x 1 0 1 1 0 0 0 1 0 0 1 0 0 1 0

0 0 0 0 x 0 0 0 1 0 0 0 0 0 0 0 0 0 1 0

0 1 1 0 x x 1 1 1 0 0 1 1 0 0 0 0 1 0 0

0 0 1 0 1 x x x x 0 0 0 0 1 0 0 0 0 0 0

0 0 1 0 1 0 0 0 x x 1 0 1 0 0 0 0 0 0 0

0 0 0 0 0 0 1 1 0 x x 0 0 0 0 0 1 1 0 0

0 0 0 0 0 0 1 0 0 1 x x x x 0 0 1 0 0 0

0 1 1 0 0 0 1 0 0 0 0 1 1 x x x 1 0 0 0

0 0 0 1 0 0 0 0 0 0 0 0 0 1 0 x 0 0 0 0

0 0 0 1 0 0 0 1 1 0 1 0 0 1 0 x x 1 1 0

0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 1 x e 1 0

Added in new antGroup 9

A1 trails count: 46 A2 trails count: 52 A3 trails count: 46 A4 trails count: 90 A5 trails count: 40 A6 trails count: 110 A7 trails count: 56 A8 trails count: 90 A9 trails count: 70 A10 trails count: 84

Ant Trail Min Size is: 36 Found at Ant38

Best Ant has size: 36, and has a path of:

s 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 1 0

x 1 1 0 0 0 0 1 0 0 0 1 1 0 0 0 0 1 0 0

x x 1 0 1 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0

0 x 1 0 1 0 0 0 0 0 0 0 1 0 1 0 0 0 0 0

0 x 1 0 0 0 1 1 0 0 0 0 1 0 0 0 0 1 0 0

0 x x x 0 0 1 0 0 0 0 0 0 0 0 0 1 0 0 0

0 1 1 x x 0 1 0 0 0 0 1 0 0 0 0 1 0 0 0

0 0 0 1 x 0 0 0 0 1 0 0 0 1 0 0 0 0 0 0

0 0 0 1 x 0 0 1 1 0 1 0 0 1 0 0 0 1 0 0

0 0 1 0 x 1 0 1 1 0 0 0 1 0 0 1 0 0 1 0

0 0 0 0 x 0 0 0 1 0 0 0 0 0 0 0 0 0 1 0

0 1 1 0 x x 1 1 1 0 0 1 1 0 0 0 0 1 0 0

0 0 1 0 1 x x x x 0 0 0 0 1 0 0 0 0 0 0

0 0 1 0 1 0 0 0 x x 1 0 1 0 0 0 0 0 0 0

0 0 0 0 0 0 1 1 0 x x 0 0 0 0 0 1 1 0 0

0 0 0 0 0 0 1 0 0 1 x x x x 0 0 1 0 0 0

0 1 1 0 0 0 1 0 0 0 0 1 1 x x x 1 0 0 0

0 0 0 1 0 0 0 0 0 0 0 0 0 1 0 x 0 0 0 0

0 0 0 1 0 0 0 1 1 0 1 0 0 1 0 x x 1 1 0

0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 1 x e 1 0