Top figure:

45 deg.

L1 = ay

amplitude

ay/(sqrt(2)*L1)

ay

ax

ax+ay

position

0

ay

ax

position

Middle figure:

45 deg.

L1 = ay

ay

amplitude

(ay*sqrt(2))/(L1)

ay

ay

ax+ay

0

ay

ax

position

Bottom figure:

45 deg.

L1 = ay

ay

(ay*sqrt(2))/(L1) ?

ax

ax

ax+ay

?

0

ay

ax

position

Solution: Splitting the square into 2 triangles and calculating amplitude per triangle

L1

a*sqrt(2)

a

h

a

L2

L2

?

L2

a*sqrt(2)

L2

?

amplitude

a/L1

position

Sqrt(2)*a

amplitude

a/(sqrt(2)*L1)

(h)/(sqrt(2)*L1)

position

2*h   Sqrt(2)*a

amplitude

a/(sqrt(2)*L1)   x2

position

a/sqrt(2)   sqrt(2)*a