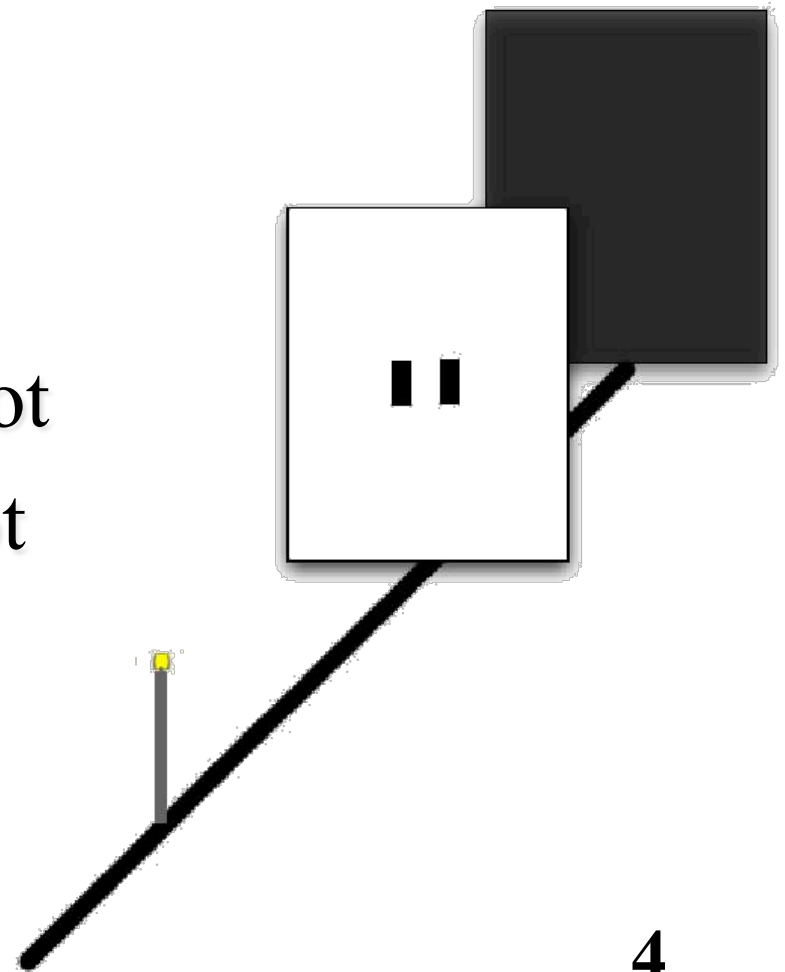# What do we expect from a light and shadow analysis using rays?

1. Two sharp bright spots
2. Two blurry bright spots
3. One wide blurry bright spot
4. One wide sharp bright spot
5. Something else

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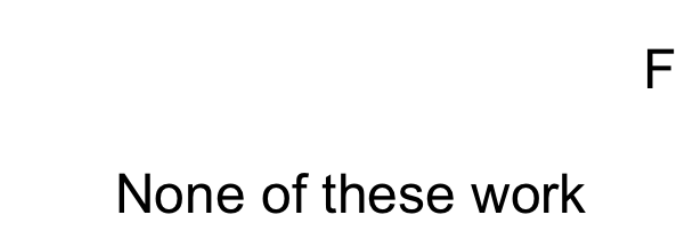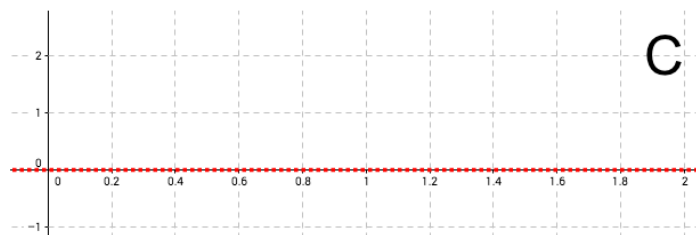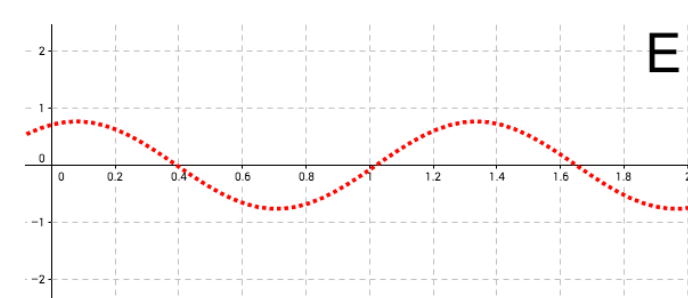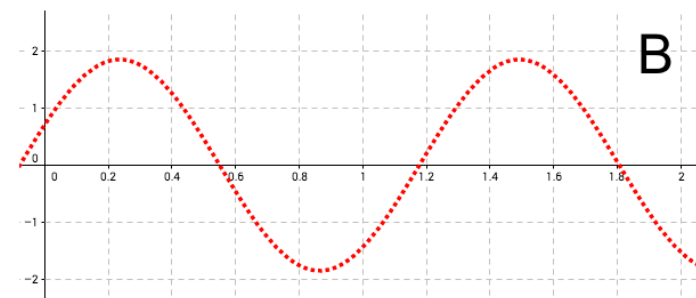# What does it look like when we add two sinusoidal waves that differ by a phase?
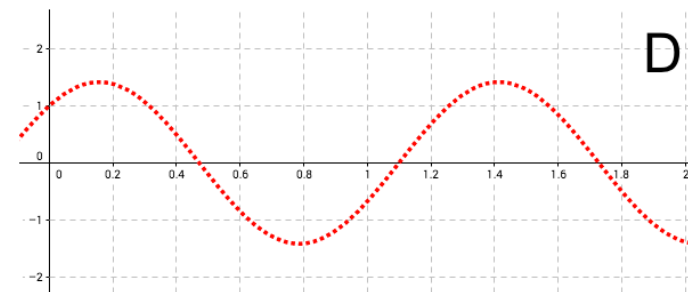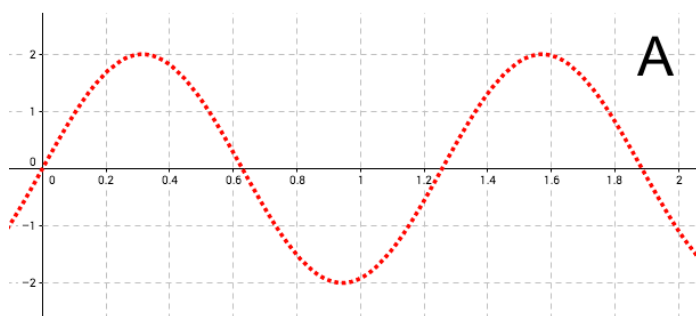
Which graph would look like the following sum of sine waves?

$$y(t) = A\sin(\omega t) + A\sin(\omega t + \phi)$$

$A = 1$

if

- $\phi = 0$

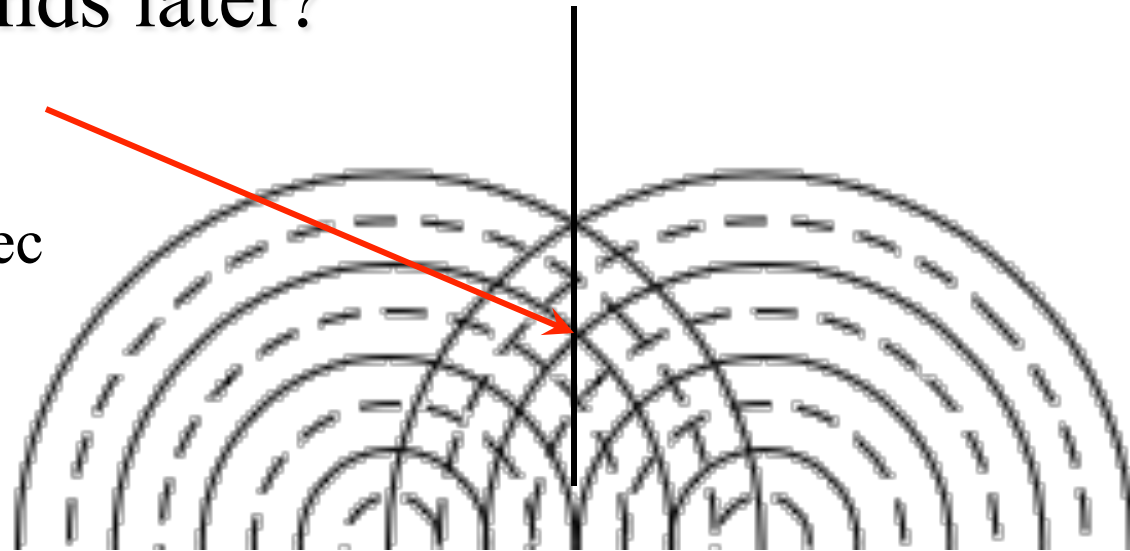- $\phi = 45^\circ$

- $\phi = 90^\circ$

- $\phi = 180^\circ$

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None of these work

It's a crest (max) now…what about 2 seconds later?

Say T = 4 sec

1. Still a crest (max)
2. Trough (min)
3. Zero
4. Other