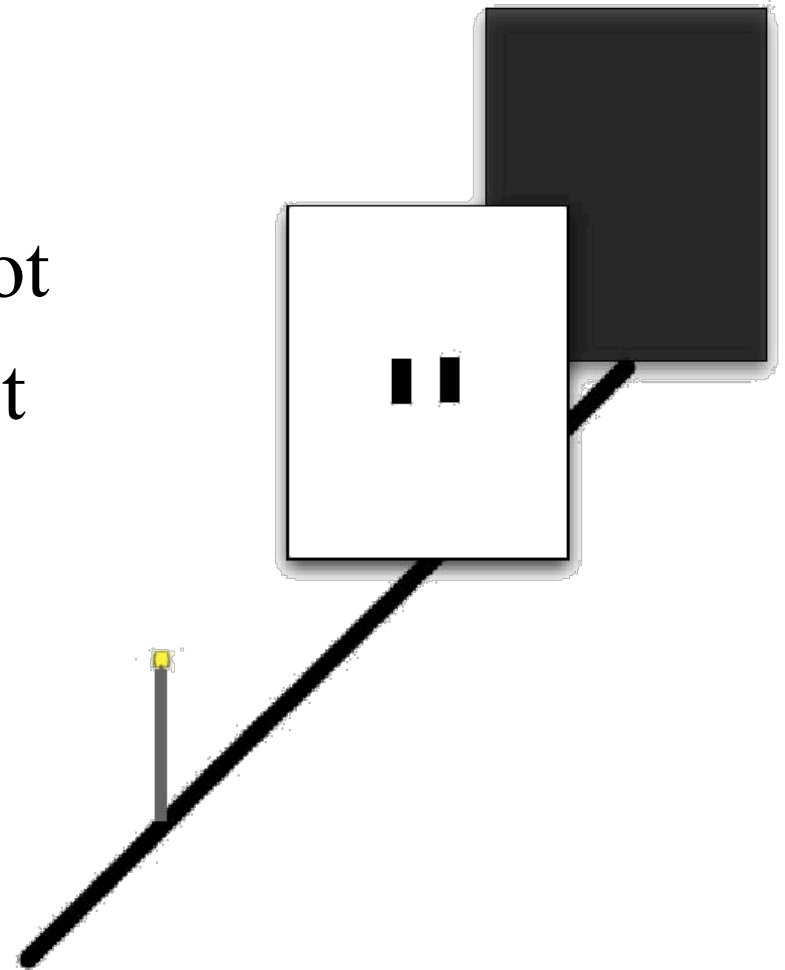


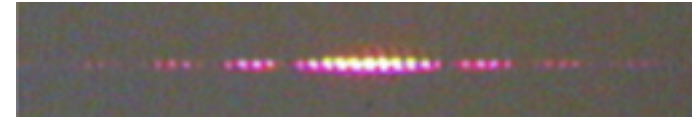
What do we expect from our light and shadow analysis?



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

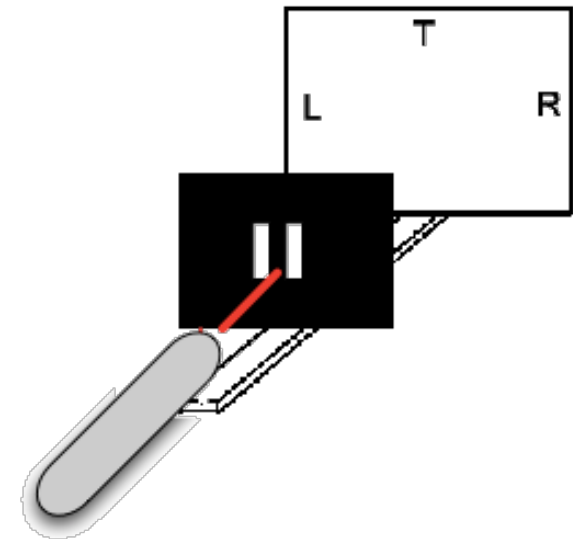


When we put light through a thin pair of slits, we get a pattern different than we would expect from our light and shadow ray-model analysis. The two slit pattern looks like this.



What will happen if we close one of the slits?

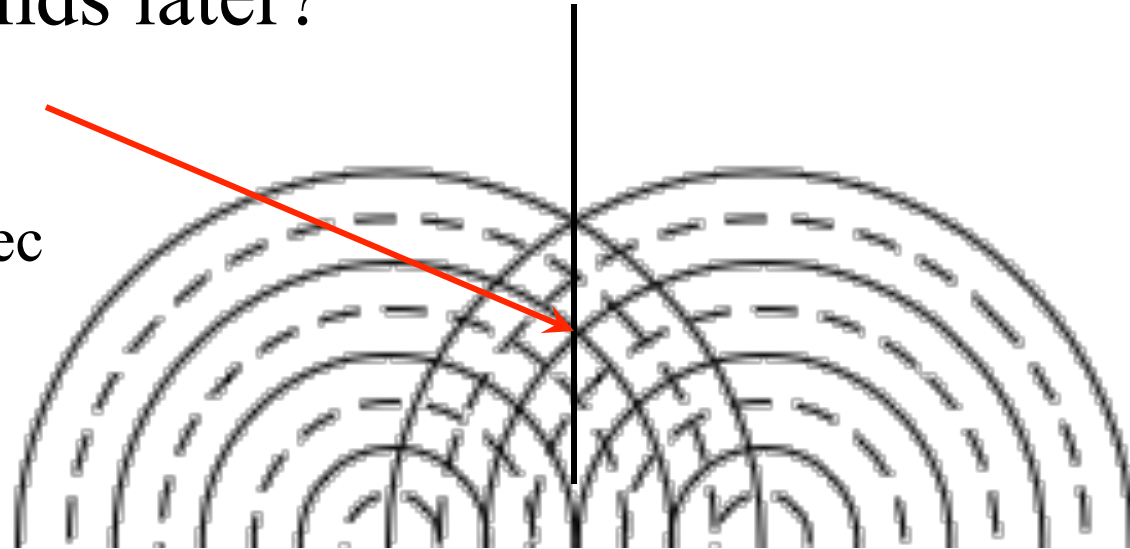
1. The pattern will get dimmer but not change shape.
2. The pattern will become one spot, like in the ray model.
3. We still have stripes but different ones.
4. Something else.



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



Say $T = 4$ sec

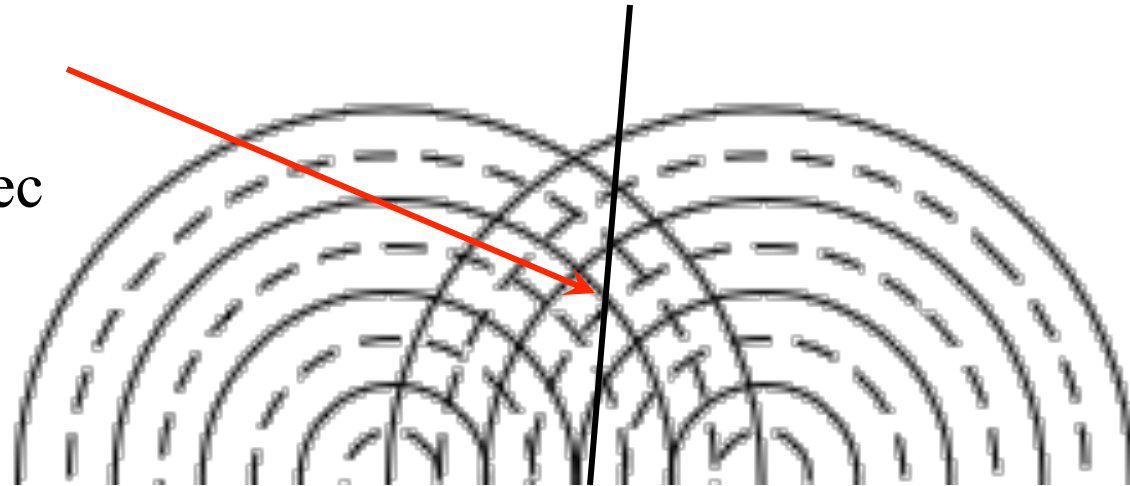


1. Still a crest (max)
2. Trough (min)
3. Zero
4. Other

It's a zero now...what about
2 seconds later?



Say $T = 4$ sec

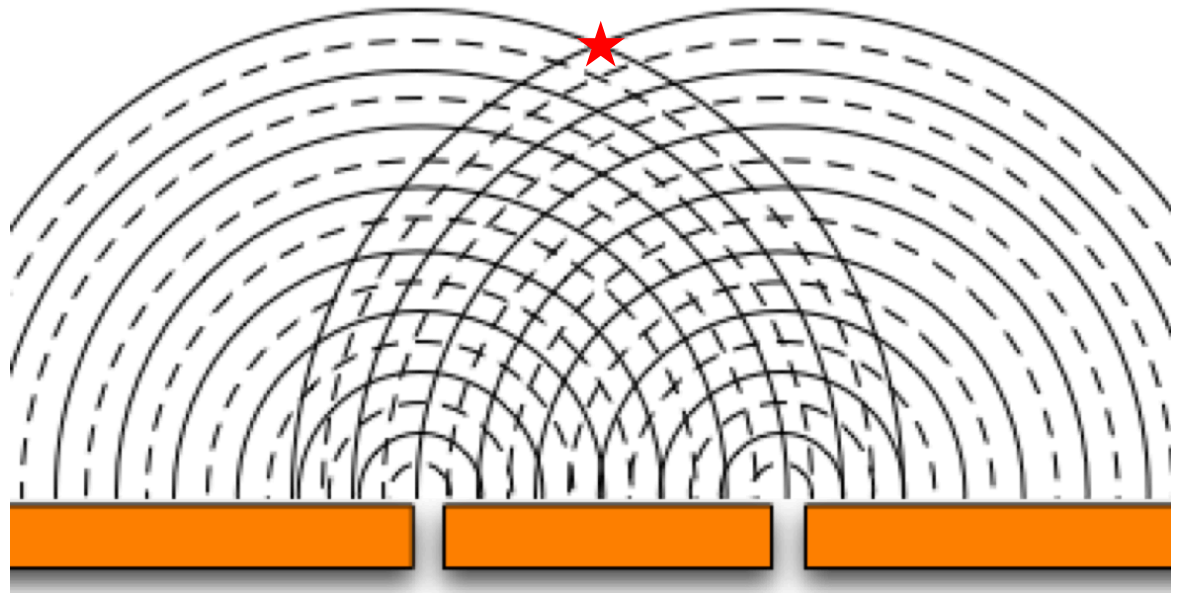


1. Maximum
2. Minimum
3. Still zero
4. Other

Below is shown a “ripple” picture showing crests and troughs of the ripples of water coming from two slits in a mask at a particular instant. Crests are solid lines, troughs are dashed. The small star represents a cork. The cork will move:



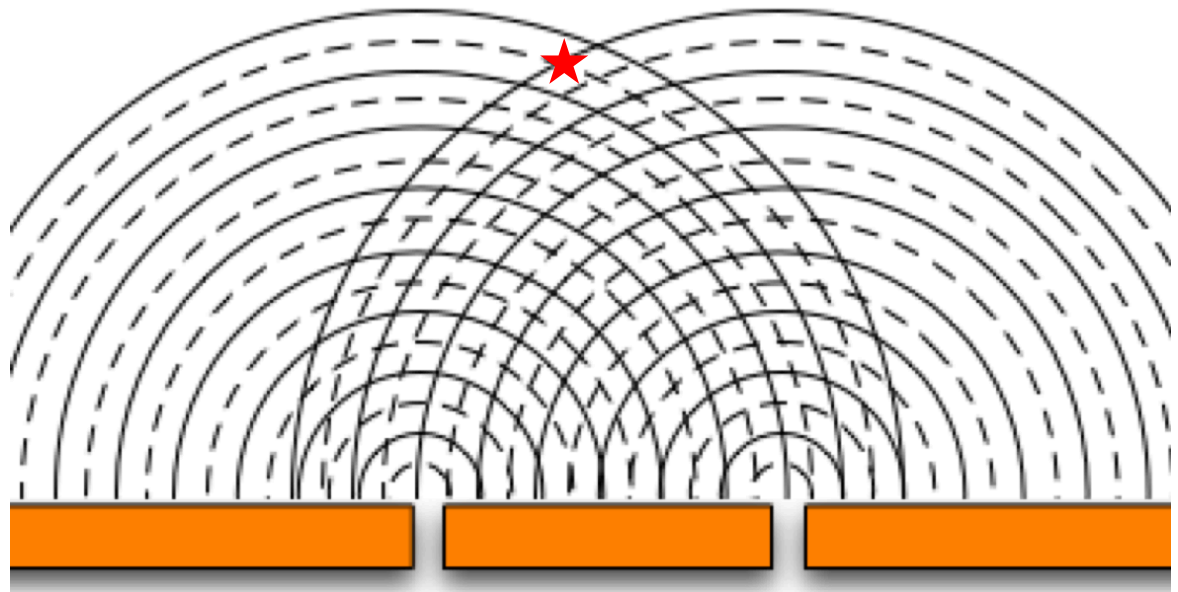
1. Not at all.
2. Outward away from the slits
3. Up and down the same as with one source
4. Up and down twice as high as with one source
5. Up and down half as high as with one source



Below is shown a “ripple” picture showing crests and troughs of the ripples of water coming from two slits in a mask at a particular instant. Crests are solid lines, troughs are dashed. The small star represents a cork. The cork will move:



1. Not at all.
2. Outward away from the slits
3. Up and down the same as with one source
4. Up and down twice as high as with one source
5. Up and down half as high as with one source



<http://www.physics.umd.edu/perg/abp/TPProbs/Problems/OP/OP39.htm>



1. $A > D > B > C$
2. $A > B > D > C$
3. $A = C > B > D$
4. $A = C > B = D$
5. $A = C > D > B = 0$
6. $C > A > B > D = 0$
7. Other

