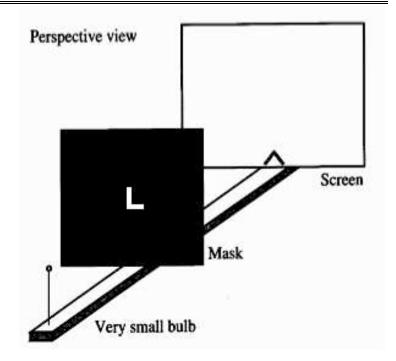
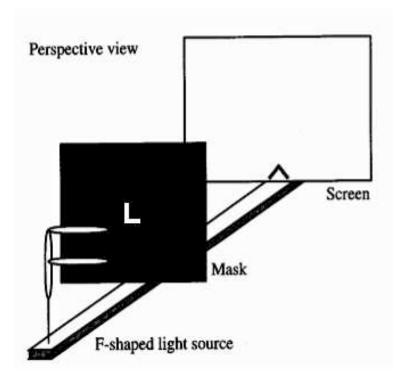
1. A mask containing a hole in the shape of the letter L is placed between a screen and a very small bulb as shown at the right.

On the diagram, sketch what you would see on the screen when the bulb is turned on.



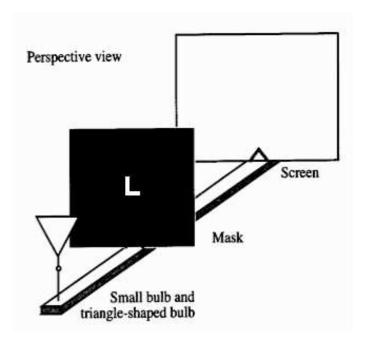
2. The small bulb is replaced by three long filament light bulbs that are arranged in the shape of the letter F as shown at the right.

On the diagram, sketch what you would see on the screen when the bulbs are turned on. The scale of your sketch should be consistent with your answer to part 1. *Explain how you determined your answer*.



3. The three long-filament bulbs are replaced by a small bulb and a large triangle-shaped bulb as shown at right.

On the diagram, sketch what you would see on the screen when the bulbs are turned on. The scale of your sketch should be consistent with your answer to part a. *Explain how you determined your answer*.



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