5 May 2022 Phys 132 Spring 2022

Warm Up Question 1

A tiny speck of dust is held between the focal point and the center of a convex lens. Someone states that, "The image (of the speck of dust) formed by a lens is located at the focal point of the lens, regardless of the distance between the speck and lens" Is this statement true or not? Explain your answer (you can refer to diagrams in the text if necessary).

- 1. Yes. The focal point is where light rays converge.
- 2. No. It will be the same distance away as the speck of dust is.

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Warm Up Question 2

Two identical objects are placed at the same distance from convex lenses (labeled A and B) and each is between the focal point and the lens. Lens A has a larger focal length than lens B. How does the height of the of the image produced by lens A compare (larger, smaller, same) to that produced by lens B? Explain your answer.

- 1. Larger.
- 2. Smaller.