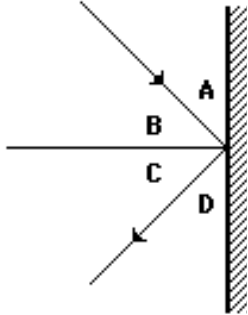


Reflection Assignment

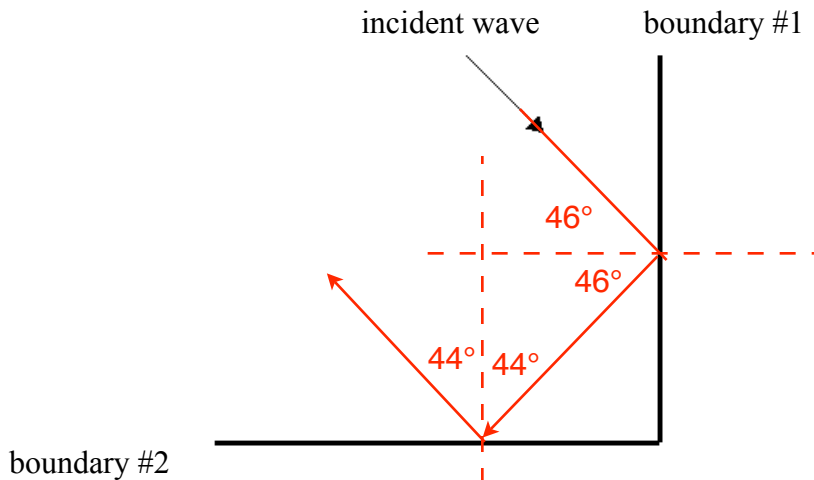
1. Which of the angles below is the angle of incidence? Which is the angle of reflection?

B

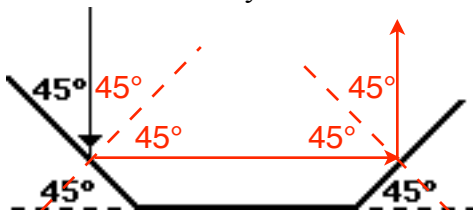
C



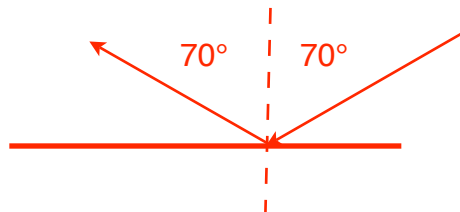
2. Show the path taken as the wave meets boundary #1, reflects and meets boundary #2. Be sure to show all wave paths, angles, and normals.



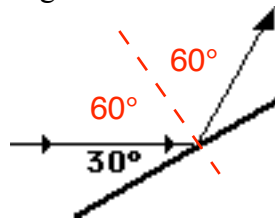
3. Draw the reflected waves off of each boundary below.



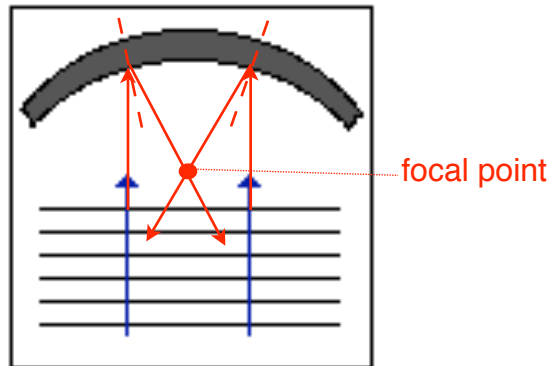
4. A wave meets a boundary at an angle of 70° between its path and the normal at the point of incidence. Calculate the angle of reflection.



5. Draw the normal line in the below diagram. What is the angle of reflection?



6. Draw the path of the reflected waves. Indicate the focal point of the reflected waves.



7. A wave meets a boundary at an angle of 55° to the normal. What angle does the path of the reflected ray take? What is the angle between them?

55°

110°

8. A wave meets a boundary at an angle of 45.0° to the normal. What angle does the path of the reflected ray take? What is the angle between them?

45.0°

90.0°

9. A wave meets a boundary at an angle of 32° to the **boundary**. What is the angle to the normal? What angle does the path of the reflected ray take? What is the angle between them?

58°

58°

116°

10. A wave meets a boundary at an angle of 67.3° to the normal. What angle does the path of the reflected ray take? What is the angle between them?

67.3°

134.6°

11. A wave meets a boundary at an angle of 19.6° to the normal. What angle does the path of the reflected ray take? What is the angle between them?

19.6°

39.6°

12. A wave meets a boundary at an angle of 23.2° to the normal. What angle does the path of the reflected ray take? What is the angle between them?

23.2°

46.4°

13. A wave meets a boundary at an angle of 84.5° to the normal. What angle does the path of the reflected ray take? What is the angle between them?

84.5°

169.0°