

# Chapter 33 End-of-Chapter Problems

Halliday & Resnick, 10th Edition

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Hit me where it Matters

## 1 Problem 1

A certain helium-neon laser emits red light in a narrow band of wavelengths centered at 632.8 nm and with a “wavelength width” (such as on the scale of Fig. 33-1) of 0.0100 nm. What is the corresponding “frequency width” for the emission?

### 1.1 Solution

## 2 Problem 5

### 2.1 Solution

## 3 Problem 7

### 3.1 Solution

## 4 Problem 9

### 4.1 Solution

## 5 Problem 11

### 5.1 Solution

## 6 Problem 13

### 6.1 Solution

## 7 Problem 19

### 7.1 Solution



## 8 Problem 21

### 8.1 Solution

## 9 Problem 29

### 9.1 Solution

## 10 Problem 33

### 10.1 Solution

## 11 Problem 37

### 11.1 Solution

## 12 Problem 41

### 12.1 Solution

## 13 Problem 43

### 13.1 Solution

## 14 Problem 45

### 14.1 Solution

## 15 Problem 49

### 15.1 Solution



## 16 Problem 51

### 16.1 Solution

## 17 Problem 55

### 17.1 Solution

## 18 Problem 59

### 18.1 Solution

## 19 Problem 65

### 19.1 Solution

## 20 Problem 69

### 20.1 Solution

## 21 Problem 71

### 21.1 Solution

## 22 Problem 75

### 22.1 Solution

## **23 Problem 83**

### **23.1 Solution**



## 24 Problem 87

### 24.1 Solution

## 25 Problem 89

### 25.1 Solution

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