Name _____ Class _____ Date _____

2-10 Standardized Test Prep

Change Expressed as a Percent

Multiple Choice

For Exercises 1–5, choose the correct letter.

1. Sam ran 3.5 miles on Saturday. On Wednesday, he ran 5.2 miles. What was his percent increase to the nearest percent?

A. 33% **B.** 42% **C.** 49% **D.** 67%

2. A department store purchases sweaters wholesale for $16. The sweaters sell retail for $35. What is the percent increase to the nearest percent?

F. 19% **G.** 46% **H.** 54% **I.** 119%

3. Josephine measured the room to be 125 ft wide and 225 ft long. What is the maximum possible area of the room?

A. 700 ft^2 **B.** 27,950.25 ft^2 **C.** 28,125 ft^2 **D.** 28,300.25 ft^2

4. You estimate the height of the flagpole to be 16 ft tall. The actual height of the flagpole is 18 ft. Which equation can be used to determine your percent error in the estimated height?

F. $\frac{16 - 18}{18}$ **G.** $\frac{|16 - 18|}{18}$ **H.** $\frac{|16 - 18|}{16}$ **I.** $\frac{16 - 18}{16}$

5. You estimate that a box can hold 1152 in^3. The box is actually 10.5 in. long, 10.5 in. wide, and 8 in. tall. What is the percent error in your estimation? Round to the nearest percent.

A. 23% **B.** 31% **C.** 42% **D.** 77%

Short Response

6. You measure a tub shaped as a rectangular prism to be 3 ft wide, 4 ft long, and 2.5 feet tall to the nearest half foot. What are the minimum and maximum volumes of the tub? What is the greatest possible percent error in calculating the volume of the tub?