

1.3 In a certain city the mean price of a quart of milk is 63 cents and the standard deviation is 8 cents. In the same city, the mean price of a pound of ground beef is \$1.75 and the standard deviation is 12 cents. A late-night convenience store charges 89 cents for a quart of milk and \$2.12 for a pound of ground beef. Which of these items is relatively more overpriced?

Formulas: $z = \frac{x - \bar{x}}{s}$

$$z_m = \frac{.89 - .63}{.08} \approx \boxed{3.25}$$

The price of milk is relatively more overpriced because the z-score is higher.

$$z = \frac{x - \mu}{\sigma}$$

$$z_{gb} = \frac{2.12 - 1.75}{.12} \approx 3.08$$

STUDY: Chapter 2: Section 2.6
• Measures of position