1. Which percent is equivalent to $\frac{4}{5}$?

   A. 20%   **C.** 80%

   B. 45%   **D.** 125%

2. Your friend evaluated an expression using $k = 0.5$ and $p = 1.6$ and got an answer of 12. Which expression did your friend evaluate?

   F. $5p + 8k$ **H.** $0.5k + 1.6p$

   G. $8p + 5k$ **I.** $0.8k + 0.5p$

3. What is 15% of 36?

4. A pair of running shoes is on sale for 25% off the original price.

   ORIGINAL PRICE $123.75

   Which price is closest to the sale price of the running shoes?

   A. $93   **C.** $124

   B. $99   **D.** $149

5. The expression below can be used to find the temperature in degrees Celsius when given F, the temperature in degrees Fahrenheit.

$$\frac{5}{9}(F - 32)$$

   What is the temperature in degrees Celsius, to the nearest degree, when the temperature in degrees Fahrenheit is 90°?

   F. 18°   **H.** 58°
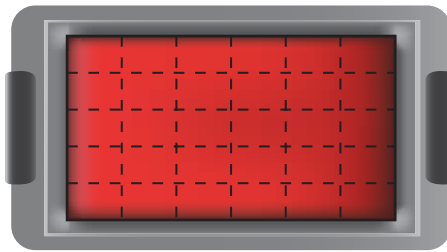
   G. 32°   **I.** 104°

6. For a party, you made a gelatin dessert in a rectangular pan and cut the dessert into equal-sized pieces as shown below.

The dessert consisted of seven layers of equal height. Each height was a different flavor, as shown below by a side view of the pan.

Cherry

Your guests ate $\frac{5}{6}$ of the pieces of the dessert. Cherry gelatin was what fraction of the dessert eaten by your guests?

A. $\frac{37}{42}$ **C.** $\frac{5}{13}$

B. $\frac{5}{42}$ **D.** $\frac{1}{7}$

7. What property was used to simplify the expression?

$$12 \times 47 = 12 \times (40 + 7)$$
$$= 12 \times 40 + 12 \times 7$$
$$= 480 + 84$$
$$= 564$$

F. Distributive Property

G. Identity Property of Addition

H. Commutative Property of Addition

I. Associative Property of Multiplication

8. Which list of numbers is in order from least to greatest?

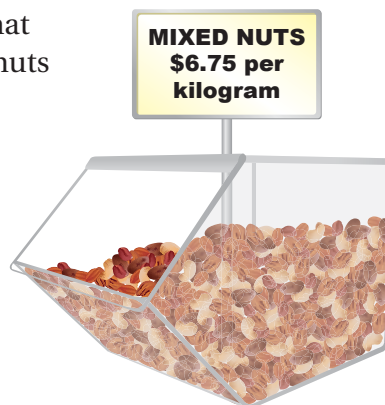**A.** $0.8, \frac{5}{8}, 70\%, 0.09$

C. $\frac{5}{8}, 70\%, 0.8, 0.09$

B. $0.09, \frac{5}{8}, 0.8, 70\%$

D. $0.09, \frac{5}{8}, 70\%, 0.8$

9. You bought 0.8 kilogram of mixed nuts. What was the total cost, in dollars, of the mixed nuts that you bought?

MIXED NUTS
$6.75 per kilogram

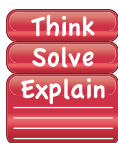**10.** Which fraction is *not* equivalent to 25%?

F. $\frac{1}{4}$

H. $\frac{5}{20}$

G. $\frac{2}{5}$

I. $\frac{25}{100}$

11. You are comparing the costs of a certain model of ladder at a hardware store and at an online store.

Think
Solve
Explain

HARDWARE STORE

Ladders: $350/ea.

Sales tax: 6% of cost of ladder

BUY HARDWARE ONLINE

Ladder $320

Sales tax: 6% of cost of ladder

Shipping & handling: 5% of cost of ladder

Part A What is the cost of the ladder at each of the stores? Show your work and explain your reasoning.

Part B Suppose that the hardware store is offering 10% off the price of the ladder and that the online store is offering free shipping & handling. Which store offers the better final cost and by how much? Show your work and explain your reasoning.