

TEST 7-3

Show your work on a separate sheet of paper.

1. Choose ALL equations that are true.

A. $\frac{8}{15} = \frac{12}{10}$ B. $\frac{8}{12} = \frac{10}{15}$ C. $\frac{15}{10} = \frac{12}{8}$ D. $\frac{15}{8} = \frac{12}{10}$

2. Uncle Sam has a scale model of the Statue of Liberty. The model is 12 inches tall. The scale of the model to the actual status is 1 inch : 6.2 meters. Which equation can Uncle Sam use to determine x, the height in meters of the Statue of Liberty?

A. $12x = 6.2$ B. $6.2x = 15$ C. $\frac{1}{6.2} = \frac{x}{12}$ D. $\frac{1}{6.2} = \frac{12}{x}$

3. A printer prints $1\frac{1}{2}$ pages per second. How many pages can it print per minute?

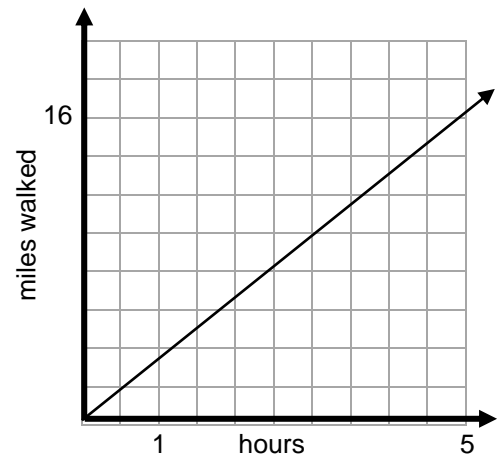
A. 90 pages B. 60 pages C. 30 pages D. 20 pages

4. Patricia likes to cross country ski. It takes her 15 minutes to ski $5\frac{1}{4}$ miles. What is her unit rate in miles per hour?

A. 10 miles/hr B. $\frac{7}{20}$ miles/hr C. $\frac{20}{7}$ miles/hr D. 21 miles/hr

5. Paco participated in a walk-a-thon to raise money for cancer research. He created a graph showing his times and distances. Assume Paco walked at a constant rate of speed. Circle all expressions that could represent his rate of speed.

- a. 3.2 mph
- b. 5 hours for every 16 miles
- c. $\frac{16 \text{ miles}}{5 \text{ hours}}$
- d. $1\frac{1}{2}$ miles per hour
- e. 8 miles in 2 hours



TEST 7-3
Continued

6. Isaiah sold nut bars to help raise money for his scout troop. The table represents the money he received for different numbers of bars he sold. Circle all of the true statements.

# of nut bars sold (x)	2	4	8	12
money received in \$ (y)	2.50	5	10	12.50

- a. This is not a proportional relationship because $(0,0)$ is not in the table.
- b. This is a proportional relationship because if graphed, the points lie on a straight line through the origin.
- c. This is not a proportional relationship because the ratio of money received to bars sold is not constant.
- d. The unit rate is \$2.50 per bar.
- e. An equation that represents this relationship is $y = 1.25x$
- f. An equation that represents the relationship is $5y = 4x$
- g. If graphed, the point $(1, 1.25)$ would represent the unit rate.
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7. Chris bought 3 pounds of cheese at Store A for \$6.75 and 5 pounds of cheese at Store B for \$12.50. Which store has the better buy? Explain how you know using three different representations.