2-7 Standardized Test Prep Solving Proportions

Multiple Choice

For Exercises 1-5, choose the correct letter.

1. What is the solution to the proportion $\frac{3}{5} = \frac{x}{10}$?

A. $\frac{10}{3}$

D. 150

2. What is the solution to the proportion $\frac{x-1}{x} = \frac{2}{3}$?

F. -2

G. 0

I. 3

3. There are 105 members of the high school marching band. For every 3 boys there are 4 girls. Which proportion represents how many boys are in the marching band?

A. $\frac{3}{7} = \frac{b}{105}$

B. $\frac{3}{4} = \frac{b}{105}$ C. $\frac{4}{7} = \frac{b}{105}$

D. $\frac{7}{3} = \frac{b}{105}$

4. A baker is making bread dough. He uses 3 cups of flour for every 8 ounces of water. How many cups of flour will he use if he uses 96 ounces of water?

F. 4

G. 12

H. 32

I. 36

5. Mr. Carter offered to stay after school for an extra help session, and $\frac{2}{11}$ of his students stayed for the session. If there were 24 students that stayed for the help session, how many students does Mr. Carter teach throughout the day?

A. 100

B. 121

C. 132

D. 144

Extended Response

6. Elisabeth goes on a 5 mile run each Saturday. Her run typically takes her 45 minutes. She wants to increase this distance to 7 miles. Determine the proportion you use to find the time it would take her to run 7 miles. Solve the proportion. What proportion can be used to determine the time it takes for her to run a marathon, which is approximately 26 miles? What is her time?