

# Test, Form 1A

Write the letter for the correct answer in the blank at the right of each question.

- Which fraction represents the ratio *3 roosters out of 10 chickens* in simplest form?  
A.  $\frac{3}{10}$       B.  $\frac{1}{3}$       C. 3      D.  $\frac{10}{3}$       1.     **A**
- Which fraction represents the ratio *2 quarts to 2 gallons* in simplest form?  
F.  $\frac{1}{8}$       G.  $\frac{1}{4}$       H.  $\frac{1}{2}$       J. 1      2.     **G**
- Alana buys 3 pounds of potatoes for \$2.82. What is the unit price of the potatoes?  
A. \$9.40 per pound  
B. \$8.46 per pound  
C. \$1.41 per pound  
D. \$0.94 per pound      3.     **D**
- Which rate has the same unit rate as 300 words in 4 minutes?  
E. 120 words in 1 minute  
G. 200 words in 2 minutes  
H. 450 words in 6 minutes  
J. 600 words in 5 minutes      4.     **H**
- Which rate is equivalent to 60 miles per hour?  
A. 97 kilometers per hour  
B. 79 kilometers per hour  
C. 58 kilometers per hour  
D. 37 kilometers per hour      5.     **A**
- Which measure is the correct metric approximation for 5 gallons?  
F. 1.2 liters      G. 1.3 liters      H. 8.8 liters      J. 18.9 liters      6.     **J**
- The cost of 3 burritos is \$22.50. If the cost is proportional to the number of burritos ordered, which of the following prices is *not* an equivalent rate?  
A. 7 burritos for \$51.50  
B. 2 burritos for \$15.00  
C. 5 burritos for \$37.50  
D. 4 burritos for \$30.00      7.     **A**

# Test, Form 1A (continued)

8. Chad jogs  $4\frac{2}{5}$  miles in  $\frac{1}{2}$  hour. What is his average speed in miles per hour?

- F.  $8\frac{1}{2}$  miles per hour                      H. 11 miles per hour

- G.  $8\frac{4}{5}$  miles per hour                      J. 22 miles per hour

8.           **G**          

9. The graph of the relationship (dogs, cost) is a line that contains the points (0, 0), (4, 12), and (8, 24). What is the constant of proportionality?

- A.  $\frac{1}{8}$                       B.  $\frac{1}{3}$                       C. 3                      D. 8

9.           **C**          

10. Which set of numbers is proportional?

F. 

<b>Bikes</b>	1	2	3	4
<b>Wheel</b>	2	4	6	8

H. 

<b>Students</b>	2	3	4	5
<b>Siblings</b>	4	6	5	8

G. 

<b>Pets</b>	1	2	3	4
<b>Feet</b>	4	8	10	14

J. 

<b>Students</b>	3	6	9	12
<b>Books</b>	6	12	18	12

10.           **F**          

11. Pia used a scale of 1 inch = 2 feet to construct a scale model of her backyard. A tree in the model has a height of 4 inches. What is the actual height of the tree?

- A. 8 inches                      B. 2 feet                      C. 4 feet                      D. 8 feet

11.           **D**          

12. At the same time a 6-foot person casts a 2-foot shadow, a nearby flagpole casts a 10-foot shadow. How tall is the flagpole?

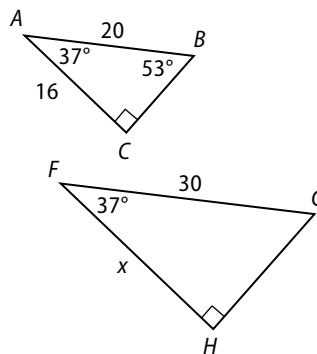
- F. 3 feet                      G. 10 feet                      H. 16 feet                      J. 30 feet

12.           **J**          

For Exercises 13 and 14, use similar triangles *ABC* and *FGH*.

13. What is the value of *x*?

- A. 37  
B. 24  
C. 18  
D. 12



13.           **B**          

14. What is the measure of  $\angle G$ ?

- F.  $37^\circ$                       G.  $47^\circ$                       H.  $53^\circ$                       J.  $90^\circ$

14.           **H**