Name Date

Practice A

5.2

Tell whether the ratios form a proportion.

 1.  2.  3. 

 4.  5.  6. 

 7.  8.  9. 

Tell whether the two rates form a proportion.

 10. 8 feet in 15 seconds; 16 feet in 40 seconds

 11. 28 people in 4 rooms; 63 people in 9 rooms

 12. 14 girls to 6 boys; 35 girls to 15 boys

 13. 45 marbles in 9 bags; 150 marbles in 36 bags

 14. You can run 4 laps in 10 minutes. Your friend can run 6 laps in 15 minutes. Are these rates proportional? Explain.

Tell whether the ratios form a proportion.

 15.  16.  17. 

 18. You get $27 to spend at the mall for doing 6 chores. Your friend gets $36 for doing 8 chores.

 a. What is your pay rate?

 b. What is your friend's pay rate?

 c. Are the pay rates equivalent? Explain.

 19. You can buy 4 tickets for $75 or 5 tickets for $94. Are the costs proportional? If not, rewrite one of the rates so the costs are proportional.

 20. A recipe requires a ratio of 4 potatoes to 6 carrots. You accidentally use
5 potatoes with 6 carrots. What is the least number of potatoes and carrots that you can add to get the correct ratio of potatoes to carrots?

Name Date

Practice B

5.2

Tell whether the ratios form a proportion.

 1.  2.  3. 

Tell whether the two rates form a proportion.

 4. $24 for 16 burgers; $15 for 10 burgers

 5. 10 used books for $4.50; 15 used books for $6.00

 6. 125 horsepower motor for an 18-foot boat; 225 horsepower motor for
a 32-foot boat

Tell whether the ratios form a proportion.

 7.  8.  9. 

 10. The seventh-grade band has 15 drummers and 12 trumpet players. The eighth-grade band has 10 drummers and 8 trumpet players. Do the ratios form a proportion? Explain.

 11. One mixture contains 6 fluid ounces of water and 10 fluid ounces
of vinegar. A second mixture contains 9 fluid ounces of water and
12 fluid ounces of vinegar. Are the mixtures proportional? If not,
how much water or vinegar would you add to the second mixture
so that they are proportional?

 12. A wholesale warehouse buys pairs of sandals to sell.

 a. The warehouse can purchase 5 pairs of sandals for $65. What is the cost rate?

 b. The warehouse can purchase 8 pairs of sandals for $96. What is the cost rate?

 c. The warehouse can purchase 10 pairs of sandals for $126.50 and will get one free pair. What is the cost rate?

 d. Are any of the cost rates proportional? Explain.

 e. Your buyer is to purchase 40 pairs of sandals. Use any combination of parts (a), (b), and (c) for your buyer to purchase the 40 pairs of sandals at the lowest possible cost.

Find the value of *x* so that the ratios form a proportion.

 13.  14. 