5.2 Exercises

12/15 FRIDAY
7ᵗʰ GRADE
MATH HOMEWORK

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✓ Vocabulary and Concept Check

1. **VOCABULARY** What does it mean for two ratios to form a proportion?

2. **VOCABULARY** What are two ways you can tell that two ratios form a proportion?

3. **OPEN-ENDED** Write two ratios that are equivalent to $\frac{3}{5}$.

4. **WHICH ONE DOESN'T BELONG?** Which ratio does *not* belong with the other three? Explain your reasoning.

$$\frac{4}{10} \qquad \frac{2}{5} \qquad \frac{3}{5} \qquad \frac{6}{15}$$

Practice and Problem Solving

Tell whether the ratios form a proportion.

5. $\frac{1}{3}, \frac{7}{21}$

6. $\frac{1}{5}, \frac{6}{30}$

7. $\frac{3}{4}, \frac{24}{18}$

8. $\frac{2}{5}, \frac{40}{16}$

9. $\frac{48}{9}, \frac{16}{3}$

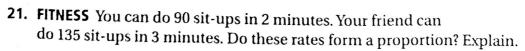10. $\frac{18}{27}, \frac{33}{44}$

11. $\frac{7}{2}, \frac{16}{6}$

12. $\frac{12}{10}, \frac{14}{12}$

Tell whether *x* and *y* are proportional.

13.

x	1	2	3	4
y	7	8	9	10

14.

x	2	4	6	8
y	5	10	15	20

Tell whether the two rates form a proportion.

15. 7 inches in 9 hours; 42 inches in 54 hours

16. 12 players from 21 teams; 15 players from 24 teams

17. 440 calories in 4 servings; 300 calories in 3 servings

18. 120 units made in 5 days; 88 units made in 4 days

19. 66 wins in 82 games; 99 wins in 123 games

20. 68 hits in 172 at bats; 43 hits in 123 at bats

21. **FITNESS** You can do 90 sit-ups in 2 minutes. Your friend can do 135 sit-ups in 3 minutes. Do these rates form a proportion? Explain.

22. **HEART RATES** Find the heart rates of you and your friend. Do these rates form a proportion? Explain.

	Heartbeats	Seconds
You	22	20
Friend	18	15