Lesson 12.1 Practice: Inverse Variation

School Launch · Algebra I · Unit 12: Rational Expressions: An Introduction · Worksheet A

No calculator

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. y varies inversely with x, and $y = 33$ when $x = 4$. Find y when $x = 11$. EASY

2. y varies inversely with x, and $y = 54$ when $x = 2$. Find y when $x = 3$. EASY

3. y varies inversely with x, and $y = 4$ when $x = 6$. Find y when $x = 8$. EASY

4. 9 workers can build a fence in 12 hours. Working at the same rate, how long would 6 workers take? MEDIUM

5. 4 workers can build a fence in 9 hours. Working at the same rate, how long would 6 workers take? MEDIUM

6. 12 workers can build a fence in 6 hours. Working at the same rate, how long would 8 workers take? MEDIUM

7. 3 workers can build a fence in 4 hours. Working at the same rate, how long would 2 workers take? MEDIUM

8. 4 workers can build a fence in 3 hours. Working at the same rate, how long would 3 workers take? HARD

9. 6 workers can build a fence in 11 hours. Working at the same rate, how long would 2 workers take? HARD

10. 4 workers can build a fence in 15 hours. Working at the same rate, how long would 20 workers take? HARD