

Algebra

Name: _____

Worksheet on Unit Analysis

Period: _____

Problems 1-6: Cancel like units, reduce the fraction and write the final answer using a “per” phrase.

1. $\frac{60 \text{ miles}}{1 \text{ hour}} \times \frac{1 \text{ hour}}{60 \text{ minutes}}$

2. $\frac{12 \text{ inches}}{1 \text{ foot}} \times \frac{3 \text{ feet}}{1 \text{ yard}}$

3. $\frac{1000 \text{ mm}}{1 \text{ m}} \times \frac{1 \text{ m}}{100 \text{ cm}}$

4. $\frac{60 \text{ seconds}}{1 \text{ minute}} \times \frac{60 \text{ minutes}}{1 \text{ hour}}$

5. $\frac{3 \text{ dollars}}{5 \text{ apples}} \times \frac{100 \text{ cents}}{1 \text{ dollar}}$

6. $\frac{32000 \text{ dollars}}{1 \text{ year}} \times \frac{1 \text{ year}}{12 \text{ months}}$

Problems 7-12: Cancel like units where possible, reduce the fraction and write the final answer with appropriate units.

7. $75 \frac{\text{miles}}{\text{hour}} \times 2 \text{ hours}$

8. $\frac{90 \text{ miles}}{2 \text{ hours}}$

9. $80 \text{ miles} \div 50 \frac{\text{miles}}{\text{hour}}$

10. $\frac{5 \text{ miles}}{10 \text{ minutes}} \times \frac{60 \text{ minutes}}{1 \text{ hour}}$

11. $\frac{1 \text{ mile}}{20 \text{ minutes}} \times \frac{60 \text{ minutes}}{1 \text{ hour}}$

12. $60 \frac{\text{miles}}{\text{hour}} \times \frac{5280 \text{ feet}}{\text{mile}} \times \frac{1 \text{ hour}}{3600 \text{ seconds}}$

