

Chapter 7 — Rational Numbers

Worksheet C: Mixed Application

Name: _____ Grade: _____ Date: _____

1. A student says $-0.3 = -\frac{1}{3}$. Explain the mistake.

2. Is 0.1234567891011... (digits keep counting up, never repeating) rational?

3. Compare: $-\frac{5}{6}$ _____ -0.8

4. Write 0.36 as a fraction, then convert your answer back to a decimal to check.

5. Compare: 0.45 _____ $\frac{4}{9}$

6. A sprinter's time is 9.58 s. Write it as a fraction over 100.

7. Order from least to greatest: $-\frac{7}{8}$, -0.9 , 0 , 0.6

8. Compare: $-\frac{3}{4}$ _____ -0.7

9. Write $\frac{5}{6}$ as a decimal.

10. A recipe calls for $\frac{2}{3}$ cup of sugar. A digital scale reads in decimals. What decimal should be entered?

11. Give a rational number between 0.5 and $\frac{3}{5}$.

12. Explain why $\frac{1}{6}$ is rational even though its decimal form never terminates.

13. Compare: -0.125 ____ $-\frac{1}{8}$

14. A temperature is -3.5°C . Write it as a mixed-sign fraction.

15. Explain why $\frac{1}{0}$ is not a rational number.