**Calculating Practice** NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Rational and Irrational Numbers

**Write each fraction as a decimal.**

1. $\frac{5}{11}$ 2. $\frac{1}{8}$ 3. $\frac{4}{5}$

4. What types of numbers are the fractions in #1-3? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Write each decimal as a fraction in simplest form.**

5. 0.12 6. . $0.\overline{57}$ 7. 1.4 8. $0.\overline{2}$

9. 4.62 10. $0.\overline{71}$ 11. 0.7 12. 6.1

13. What types of numbers are the decimals in #5-12? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Compare. Write** $<, >, or =.$

14. $\frac{4}{7}$ $$ $\frac{3}{8}$ 15. $\frac{3}{4}$ $$ 0.75 16. 0.35 $$ $\frac{1}{3}$

17. $0.\overline{5}$ $$ $\frac{5}{9}$ 18. 1.5 $$ 1 $\frac{3}{5}$ 19. $\frac{2}{3}$ $$ 0.67

20. What types of numbers do you see in #14-19? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Estimate each of the following to the nearest tenth.**

1. $\sqrt{2 }$ is between \_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_, so $\sqrt{2 }$ $≈$ \_\_\_\_\_\_\_\_.
2. $\sqrt{7}$ is between \_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_, so $\sqrt{7 }$ $≈$ \_\_\_\_\_\_\_\_.
3. $\sqrt{23 }$ is between \_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_, so $\sqrt{23 }$ $≈$ \_\_\_\_\_\_\_\_.
4. $\sqrt{34 }$ is between \_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_, so $\sqrt{34 }$ $≈$ \_\_\_\_\_\_\_\_.
5. $\sqrt{104 }$ is between \_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_, so $\sqrt{104 }$ $≈$ \_\_\_\_\_\_\_\_.
6. What types of numbers do you see in #21-23? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Compare. Write,** $<, >, =.$

1. $\sqrt{3}+5 3+ \sqrt{5}$ 28. $\sqrt{10}+2 10+ \sqrt{2}$

29. $ \sqrt{2}+4 2+ \sqrt{4}$ 30. $\sqrt{12}+6 12+ \sqrt{6}$

**Order the numbers from least to greatest…**

31. $\sqrt{3}, π, 1.5$ 32. $\sqrt{5}, 2.5, \sqrt{3}$

33. $π^{2}, 10, \sqrt{75}$ 34. $\sqrt{7}, \frac{\sqrt{8}}{2}, 2$