Name _____

Real, Real, Real Numbers!!!

Name all of the sets of numbers to which each real number belongs. Let W = whole numbers, Z = integers, Q = rational numbers, and I = irrational numbers.

1. 12

2. 25

3. -5

4. $\frac{1}{8}$

5. $\frac{1}{9}$

6. 0.343434. . .

7. $\sqrt{31}$

8. $\sqrt{7}$

9. $\frac{25}{3}$

10. $-\frac{32}{4}$

11. 6.54

12. 24.6

13. 418

14. 0

15. 0.050050005 . . .

Determine whether each statement is *sometimes, always,* or *never* true.

16. A whole number is a rational number.

17. A rational number is a whole number.

18. A negative number is an integer.

19. Zero is an irrational number.

Replace each ◎ with <, >, or = to make a true statement.

20. $\sqrt{4}$ ◎ $2\frac{3}{7}$

21. $\sqrt{5}$ ◎ 2.1

22. $-\sqrt{12}$ ◎ -3.5

23. $\sqrt{104.04}$ ◎ 10.2

24. 7.8 ◎ $\sqrt{55}$

25. 15.1 ◎ $\sqrt{231}$

Order each set of numbers from least to greatest.

26. $5\frac{1}{3}$, 5.3, $\sqrt{28}$, $2\frac{1}{4}$

27. $\sqrt{53}$, $7\frac{1}{4}$, $\frac{36}{5}$, 7.27

28. -9.35, $-\sqrt{72.75}$, $-9\frac{2}{10}$, -9

ALGEBRA Solve each equation. Round to the nearest tenth, if necessary.

29. $a^2 = 64$

30. $d^2 = 169$

31. $f^2 = 441$

32. $76 = g^2$

33. $115 = h^2$

34. $k^2 = 450$

35. $b^2 = 4.41$

36. $y^2 = 0.36$

37. $m^2 = 0.0025$