

# 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.

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|---------------------|------------------|--------------------|
| 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  $\odot$  with  $<$ ,  $>$ , or  $=$  to make a true statement.

- |                                   |                                |
|-----------------------------------|--------------------------------|
| 20. $\sqrt{4} \odot 2\frac{3}{7}$ | 21. $\sqrt{5} \odot 2.1$       |
| 22. $-\sqrt{12} \odot -3.5$       | 23. $\sqrt{104.04} \odot 10.2$ |
| 24. $7.8 \odot \sqrt{55}$         | 25. $15.1 \odot \sqrt{231}$    |

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.

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|------------------|------------------|--------------------|
| 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. $m^2 = 0.0025$ |