

1-2 Practice

Form G

Properties of Real Numbers

Classify each variable according to the set of numbers that best describes its values.

1. the area of the circle A found by using the formula πr^2
2. the number n of equal slices in a pizza; the portion p of the pizza in one slice
3. the air temperature t in Saint Paul, MN, measured to the nearest degree Fahrenheit
4. the last four digits s of a Social Security number

Graph each number on a number line.

- | | | | |
|---------|---------------|----------|--------------------|
| 5. -1 | 6. $\sqrt{3}$ | 7. 2.8 | 8. $-2\frac{1}{2}$ |
|---------|---------------|----------|--------------------|

Compare the two numbers. Use $>$ or $<$.

- | | |
|-------------------------------|------------------------------|
| 9. $-\sqrt{2}, -2$ | 10. $4, \sqrt{17}$ |
| 11. $\sqrt{29}, 5$ | 12. $\sqrt{50}, 6.8$ |
| 13. $11, \sqrt{130}$ | 14. $-6, -\sqrt{30}$ |
| 15. $7\frac{1}{2}, \sqrt{67}$ | 16. $-\sqrt{10}, -\sqrt{12}$ |

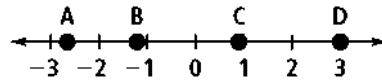
Name the property of real numbers illustrated by each equation.

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|--|--|
| 17. $2(3 + \sqrt{5}) = 2 \cdot 3 + 2 \cdot \sqrt{5}$ | 18. $16 + (-13) = -13 + 16$ |
| 19. $-7, \frac{1}{-7} = 1$ | 20. $5(0.2 \cdot 7) = (5 \cdot 0.2) \cdot 7$ |

1-2 Practice (continued)

Properties of Real Numbers

Estimate the numbers graphed at the labeled points.



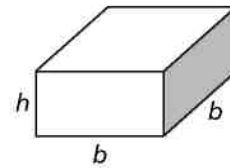
21. point A

22. point B

23. point C

24. point D

Geometry To find the length of side b of a rectangular prism with a square base, use the formula $b = \sqrt{\frac{V}{h}}$, where V is the volume of the prism and h is the height. Which set of numbers best describes the value of b for the given values of V and h ?



25. $V = 100$, $h = 5$

26. $V = 100$, $h = 25$

27. $V = 100$, $h = 20$

28. $V = 5$, $h = 20$

Write the numbers in increasing order.

29. $2\sqrt{2}$, $\frac{4}{5}$, $-\frac{5}{4}$, 0.9 , -1

30. $\frac{5}{8}$, -6 , $\frac{2}{3}$, $-\pi$, -0.5

Justify the equation by stating one of the properties of real numbers.

31. $(x + 37) + (-37) = x + (37 + (-37))$

32. $x \cdot 1 = x$

33. $x + (37 + (-37)) = x + 0$

34. $x + 0 = x$