

Practice Masters Level A

2.1 The Real Numbers and Absolute Value

Insert $<$, $>$, or $=$ to make each statement true.

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|-----------------------------------------|---------------------------------|-----------------------------------------|
| 1. 11 _____ 6 | 2. 0 _____ 6 | 3. 0 _____ -6 |
| 4. -7 _____ 5 | 5. 4 _____ -3 | 6. 3 _____ -4 |
| 7. -2 _____ 1 | 8. -19 _____ 1 | 9. 0 _____ -28 |
| 10. -5 _____ -4 | 11. -8 _____ -1 | 12. -18 _____ -4 |
| 13. $-2\frac{1}{2}$ _____ -2 | 14. $-1\frac{3}{4}$ _____ -2 | 15. $-5\frac{1}{4}$ _____ -5.25 |
| 16. $-\frac{1}{3}$ _____ $-\frac{2}{3}$ | 17. $-\frac{2}{5}$ _____ -0.4 | 18. $-\frac{1}{2}$ _____ $-\frac{1}{4}$ |
| 19. -1 _____ -1.1 | 20. -2.83 _____ -2.8 | 21. $-3\frac{3}{8}$ _____ -3.375 |

Find the opposite of each number.

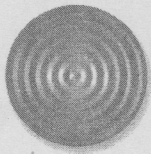
- | | | | |
|----------------|------------------|--------------------------|---------------------------|
| 22. 18 _____ | 23. -5 _____ | 24. -9 _____ | 25. $(8 - 2)$ _____ |
| 26. 0 _____ | 27. -1.4 _____ | 28. $4\frac{1}{8}$ _____ | 29. $-3\frac{2}{7}$ _____ |
| 30. x _____ | 31. m _____ | 32. $-x$ _____ | 33. $-z$ _____ |

Find the absolute value of each number.

- | | | | |
|----------------|----------------|----------------|---------------------|
| 34. 18 _____ | 35. -5 _____ | 36. -9 _____ | 37. $(8 - 2)$ _____ |
|----------------|----------------|----------------|---------------------|

Simplify each expression.

- | | | |
|----------------------|--------------------------|--------------------------|
| 38. $-(-1)$ _____ | 39. $-(-6)$ _____ | 40. $-(8 + 4)$ _____ |
| 41. $-(8 - 4)$ _____ | 42. $-(8 \cdot 4)$ _____ | 43. $-(8 \div 4)$ _____ |
| 44. $-(7)$ _____ | 45. $-(5 - 5)$ _____ | 46. $-(7 - 6.5)$ _____ |
| 47. $ 6 $ _____ | 48. $ 101 $ _____ | 49. $ -13 $ _____ |
| 50. $- 12 $ _____ | 51. $ 18 \div 2 $ _____ | 52. $- 9 \cdot 5 $ _____ |



Practice Masters Level B

2.1 The Real Numbers and Absolute Value

Insert $<$, $>$, or $=$ to make each statement true.

1. -7.1 _____ $-7\frac{1}{5}$

2. -6.2 _____ -6.25

3. $-10\frac{1}{2}$ _____ $-10\frac{1}{4}$

4. -2 _____ $-|-2|$

5. $-(-2)$ _____ -2

6. $-(-2)$ _____ $|-2|$

Simplify each expression.

7. $-|\frac{91}{7}|$ _____

8. $-|-\frac{91}{7}|$ _____

9. $-(-14) + 2$ _____

10. $-| -(-4) |$ _____

11. $|12 + 12|$ _____

12. $-|12 + 12|$ _____

13. $|12| + |-12|$ _____

14. $|12| - |-12|$ _____

15. $|12| \cdot |12|$ _____

16. $|12| \cdot |-12|$ _____

17. $|6| \div |-3|$ _____

18. $|-6| \div |-3|$ _____

19. $-(-0.5) \cdot 8$ _____

20. $-|3.5 - 1.7|$ _____

21. $1\frac{3}{4} - |-\frac{1}{2}|$ _____

22. $-|\frac{5}{6} \div \frac{1}{3}|$ _____

23. $-(-x)$ _____

24. $-(-z)$ _____

Determine whether each statement is true or false.

25. The expression $-x$ is always negative. _____

26. If $-x$ is positive, then x is negative. _____

27. There are two real numbers whose absolute values are each 0.9. _____

28. $\sqrt{13}$ is an irrational number. _____

29. If x is negative, then $-x$ is to the left of x on the number line. _____