

Algebra I Practice N.RN.B.3: Simplifying Radicals 1

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NAME: _____

Evaluate:

1. $\sqrt{169}$
 [A] 169 [B] 13 [C] -13 [D] -169

2. $-\sqrt{64}$
 [A] 64 [B] 8 [C] -64 [D] -8

Simplify:

3. $\sqrt{\frac{121}{144}}$
 [A] $\frac{13}{14}$ [B] $\frac{11}{144}$ [C] $\frac{11}{12}$ [D] $\frac{11}{72}$

4. $\sqrt{0.49}$
 [A] 0.35 [B] 0.7 [C] 0.07 [D] 0.035

5. $\sqrt{18}$
 [A] $3\sqrt{6}$ [B] $3\sqrt{2}$
 [C] $6\sqrt{3}$ [D] $2\sqrt{3}$

6. $\sqrt{50}$
 [A] $10\sqrt{5}$ [B] $5\sqrt{2}$
 [C] $5\sqrt{10}$ [D] $2\sqrt{5}$

7. $\sqrt{12}$
 [A] $3\sqrt{2}$ [B] $6\sqrt{2}$
 [C] $2\sqrt{6}$ [D] $2\sqrt{3}$

8. $\sqrt{45}$
 [A] $3\sqrt{5}$ [B] $5\sqrt{3}$
 [C] $15\sqrt{3}$ [D] $3\sqrt{15}$

9. $\sqrt{20}$
 [A] $10\sqrt{2}$ [B] $5\sqrt{2}$
 [C] $2\sqrt{5}$ [D] $2\sqrt{10}$

10. $\sqrt{300}$
 [A] $10\sqrt{30}$ [B] $30\sqrt{10}$
 [C] $10\sqrt{3}$ [D] $3\sqrt{10}$

11. $\sqrt{45}$
 [A] $15\sqrt{3}$ [B] $3\sqrt{15}$
 [C] $3\sqrt{5}$ [D] $5\sqrt{3}$

12. $\sqrt{300}$
 [A] $10\sqrt{3}$ [B] $3\sqrt{10}$
 [C] $30\sqrt{10}$ [D] $10\sqrt{30}$

13. $\sqrt{75}$
 [A] $15\sqrt{5}$ [B] $5\sqrt{15}$
 [C] $5\sqrt{3}$ [D] $3\sqrt{5}$

14. Approximate $\sqrt{79}$ and write the answer as a decimal to the nearest tenth.
 [A] 9.9 [B] 8.9 [C] 8.7 [D] 8.8

15. Use a calculator to estimate $\sqrt{18}$.
 [A] 3.743 [B] 4.243
 [C] 4.743 [D] 3.243

16. $\sqrt{152}$ is approximately equal to ____.
 [A] 14 [B] 15.2 [C] 12 [D] 120

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[1] B

[2] D

[3] C

[4] B

[5] B

[6] B

[7] D

[8] A

[9] C

[10] C

[11] C

[12] A

[13] C

[14] B

[15] B

[16] C