

Unit 11: Radicals and Sequences  
Simplifying & Estimating Practice- Day 2

Name: \_\_\_\_\_  
Date: \_\_\_\_\_ Period: \_\_\_\_

Determine between which two whole numbers does each of the following radicals falls:

1.  $\sqrt{91}$

2.  $\sqrt{83}$

3.  $\sqrt{115}$

4.  $\sqrt{200}$

5.  $\sqrt{450}$

Simplify the following radicals:

6.  $2\sqrt{24}$

7.  $5\sqrt{45}$

8.  $2\sqrt{289}$

9.  $4\sqrt{50}$

10.  $3\sqrt{32}$

Simplify the following radicals to have a rational denominator:

11.  $\frac{4}{\sqrt{5}}$

12.  $\frac{2}{\sqrt{16}}$

13.  $\frac{5}{\sqrt{10}}$

14.  $\frac{3}{\sqrt{7}}$

15.  $\frac{2}{\sqrt{8}}$

# What Did Dr. Drone Say To the Guy Who Thought He Was a \$100 Bill?



Simplify the expression and find your answer in the adjacent answer column. Write the letter of the exercise in the box that contains the number of the answer. Assume that all variables represent nonnegative numbers.

G  $\sqrt{12}$

I  $\sqrt{50}$

O  $\sqrt{45}$

E  $\sqrt{600}$

S  $\sqrt{98}$

U  $\sqrt{48}$

O  $\sqrt{125}$

W  $\sqrt{162}$

9  $5\sqrt{2}$

2  $5\sqrt{5}$

35  $6\sqrt{2}$

33  $4\sqrt{3}$

14  $10\sqrt{6}$

20  $2\sqrt{3}$

5  $4\sqrt{5}$

23  $9\sqrt{2}$

36  $3\sqrt{5}$

19  $5\sqrt{3}$

4  $7\sqrt{2}$

A  $2\sqrt{18}$

O  $8\sqrt{28}$

G  $-3\sqrt{1000}$

E  $5\sqrt{75}$

D  $-4\sqrt{490}$

L  $9\sqrt{72}$

H  $-7\sqrt{80}$

O  $3\sqrt{144}$

6 36

37  $-30\sqrt{3}$

18  $6\sqrt{2}$

21  $25\sqrt{3}$

16  $-28\sqrt{6}$

26  $54\sqrt{2}$

29  $16\sqrt{7}$

13  $-28\sqrt{5}$

24  $45\sqrt{3}$

11  $-30\sqrt{10}$

38  $-28\sqrt{10}$



Y  $\sqrt{16n^2}$

N  $\sqrt{20n^2}$

H  $\sqrt{49n^3}$

T  $\sqrt{63n^3}$

O  $\sqrt{36n^4}$

L  $-\sqrt{200n^4}$

P  $\sqrt{900n^5}$

G  $\sqrt{60n^8}$

17  $7n\sqrt{n}$

7  $30n^2\sqrt{n}$

15  $3n^2\sqrt{5n}$

10  $2n\sqrt{5}$

25  $-10n^2\sqrt{2}$

12  $3n\sqrt{7n}$

27  $4n^4\sqrt{5}$

1  $2n^4\sqrt{15}$

31  $4n$

32  $6n^2$

30  $-10n^2\sqrt{2n}$

O  $\sqrt{25x^2y}$

D  $\sqrt{90x^4y^2}$

G  $\sqrt{81x^3y^4}$

I  $\sqrt{24x^2y^6}$

C  $\sqrt{15xy^3}$

P  $3\sqrt{500x^8y^2}$

N  $-2\sqrt{121x^3y}$

H  $4\sqrt{44x^6y^5}$

8  $30x^4y\sqrt{5}$

34  $-22x^2\sqrt{xy}$

28  $3x^2y\sqrt{10}$

5  $8x^3y^2\sqrt{11y}$

22  $xy\sqrt{15}$

24  $2xy^3\sqrt{6}$

37  $5x\sqrt{y}$

19  $-22x\sqrt{xy}$

16  $y\sqrt{15xy}$

3  $30y^4\sqrt{5y}$

35  $9xy^2\sqrt{x}$

1	2	3	4	5	6	7	8	9	10	11
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12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
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