

Name: _____

*Show all work!

8.NS.1-2 Number System Cumulative Review HW

1. Which list of numbers contains an irrational number?

- A. $\frac{1}{5}, 0, \sqrt{9}$
- B. $\frac{5}{8}, 2.5, \sqrt{10}$
- C. $\frac{3}{17}, 0.40, \sqrt{64}$
- D. $\frac{1}{2}, 1.529783, \sqrt{36}$

2. The value of $\sqrt{21}$ is between which two numbers?

- A. between 20 and 22
- B. between 10 and 11
- C. between 4 and 5
- D. between 2 and 3

3. Which list of numbers is ordered from least to greatest?

- A. $-8, -\sqrt{65}, -8.5$
- B. $-8.5, -\sqrt{65}, -8$
- C. $-\sqrt{65}, -8.5, -8$

4. Explain why 9 is the best whole number estimate of $\sqrt{83}$.

- A. 83 is between 82 and 85, and 83 is closer to 82 than it is to 85.
- B. $\sqrt{83}$ is a perfect square.
- C. 9 is a perfect square.
- D. 83 is between 81 and 100 and 83 is closer to 9^2 than it is to 10^2 .

5. Mandy knows the square root of 36 is 6 and the square root of 49 is 7. Using this information, which number is closest to the square root of 40?

- A. 6.1
- B. 6.3
- C. 6.8
- D. 6.9

6. Which is closest to the value of $10\sqrt{63}$?

- A. 24
- B. 80
- C. 158
- D. 315

7. Which value below is the greatest?

- A. $\sqrt{10}$
- B. $\frac{8}{3}$
- C. $\sqrt{3}$
- D. $\frac{11}{12}$

8. Which fraction is equivalent to $0.\bar{4}$?

- A. $\frac{4}{7}$
- B. $\frac{4}{9}$
- C. $\frac{4}{10}$
- D. $\frac{4}{11}$

9. Between which two whole numbers does $\sqrt{57}$ lie?

- A. 58 and 56
- B. 29 and 28
- C. 8 and 7
- D. 8 and 6

10. Which number below is between 8 and 10?

- A. $\sqrt[3]{343}$
- B. $\sqrt[3]{1,100}$
- C. $\sqrt{38}$
- D. $\sqrt{77}$

11. A square tile has an area of 75 square inches. Which is the best estimate for the length of one side of the tile?

- A. between 6 and 8 inches
- B. between 8 and 10 inches
- C. between 37 and 50 inches
- D. between 64 and 81 inches

12. Which of these statements is true?

- A. $\sqrt{11}$ and $\sqrt{14}$ are both between 3 and 4
- B. $\sqrt{11}$ and $\sqrt{14}$ are both between 3 and 3.5
- C. $\sqrt{11}$ and $\sqrt{14}$ are both between 3.5 and 4
- D. $\sqrt{11}$ and $\sqrt{14}$ are both between 10 and 15

13. Which set of numbers below contains only natural numbers?

- A. 0, 1, 8, 12
- B. 4, 9, 18, 25
- C. -2, 5, 7, 15
- D. $\sqrt{4}, \sqrt{9}, \sqrt{12}, \sqrt{16}$