

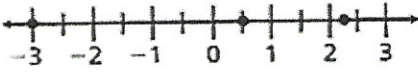
Name _____

Mrs. Roumbos

Date _____

8R Period _____

Take Home Quiz #10
Show all work where possible!
Due: _____

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| <p>1) Which set of numbers includes the square root of 20?</p> <p>A) irrational numbers B) integers C) rational numbers D) whole numbers</p> | <p>2) Which number is an irrational number?</p> <p>A) $4\frac{5}{6}$ B) -11 C) 0.15783623... D) $2.3\overline{58}$</p> |
| <p>3) Which of these is a rational number?</p> <p>A) $\sqrt{8}$ B) $\sqrt{25}$ C) $\sqrt{30}$ D) π</p> | <p>4) Which is an irrational number?</p> <p>A) $\sqrt{81}$ B) -11 C) $\sqrt{5}$ D) $0.\overline{3}$</p> |
| <p>5) Which choice orders the numbers from least to greatest? <i>Show work!</i></p> <p>A) $2.\overline{22}$, $\sqrt{5}$, $2\frac{3}{5}$, $2\frac{5}{8}$ B) $2\frac{5}{8}$, $2\frac{3}{5}$, $2.\overline{22}$, $\sqrt{5}$ C) $2\frac{5}{8}$, $2\frac{3}{5}$, $\sqrt{5}$, $2.\overline{22}$ D) $2.\overline{22}$, $2\frac{3}{5}$, $2\frac{5}{8}$, $\sqrt{5}$</p> | <p>6) Between which two whole numbers is $\sqrt{456}$?</p> <p>A) 20 and 21 B) 21 and 22 C) 22 and 23 D) 23 and 24</p> |
| <p>7) Which square root is marked as a point on this number line?</p>  <p>A) $\sqrt{-3}$ B) $\sqrt{0.5}$ C) $\sqrt{2.5}$ D) $\sqrt{5}$</p> | <p>8) $\sqrt{175} \approx$</p> <p>A) between 12 and 13 B) between 13 and 14 C) between 14 and 15 D) 14.1</p> |
| <p>9) Between which two whole numbers is $\sqrt{227}$?</p> <p>A) 20 and 21 B) 15 and 16 C) 13 and 14 D) 11 and 12</p> | <p>10) Which number is greater than $\frac{7}{2}$?</p> <p>A) $\sqrt[3]{27}$ B) $\sqrt{13}$ C) $3.\overline{4}$ D) π</p> |

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| <p>11) Which symbols makes this number sentence true? Show your work.</p> $\pi \quad \underline{\hspace{2cm}} \quad \sqrt{4}$ <p>A) < B) > C) = D) \leq</p> | <p>12) Which answer lists the numbers from greatest to least? <i>Show work!</i></p> <p>A) $\frac{6}{11}$, 1.015, $\sqrt{3}$, $\sqrt[3]{8}$ B) $\sqrt{3}$, $\sqrt[3]{8}$, 1.015, $\frac{6}{11}$ C) $\sqrt[3]{8}$, $\sqrt{3}$, 1.015, $\frac{6}{11}$ D) $\sqrt[3]{8}$, $\frac{6}{11}$, 1.015, $\sqrt{3}$</p> |
| <p>13) Between which two whole numbers is $\sqrt[3]{83}$?</p> <p>A) 4 and 5 B) 6 and 7 C) 8 and 9 D) 9 and 10</p> | <p>14) Between which two whole numbers is $\sqrt{355}$?</p> <p>A) 18 and 19 B) 17 and 18 C) 19 and 20 D) 16 and 17</p> |
| <p>15) What is the value of $\sqrt{81}$?</p> <p>A) 0.81 B) 9 C) $\frac{1}{9}$ D) 40.5</p> | <p>16) Which number is a perfect square?</p> <p>A) 600 B) 529 C) 238 D) 156</p> |
| <p>17) Which shows 0.0000519 expressed in scientific notation?</p> <p>A) 5.19×10^{-5} B) 5.19×10^5 C) 51.9×10^{-4} D) 51.9×10^4</p> | <p>18) What is the value of $\sqrt[3]{64}$?</p> <p>A) 16 B) 4 C) 8 D) 3</p> |
| <p>19) Which shows another way to write $6 \cdot 6 \cdot 6 \cdot 6 \cdot 6$?</p> <p>A) 6^5 B) 5^6 C) 6^6 D) 5^5</p> | <p>20) What standard number is represented by 3.8×10^5?</p> <p>A) 3,800 B) 38,000 C) 380,000 D) 3,800,000</p> |

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| <p>21) Which shows 0.00000464 expressed in scientific notation?</p> <p>A) 46.4×10^{-5} B) 4.64×10^6 C) 4.64×10^{-6} D) 4.64×10^5</p> | <p>22) What is the value of 3^{-2}?</p> <p>A) -32 B) -6 C) 1 D) $\frac{1}{9}$</p> |
| <p>23) What is 2.48×10^3 written in standard form?</p> <p>A) .00248 B) 24,800 C) 2,480 D) 2.48</p> | <p>24) What is the value of 2^{-4}?</p> <p>A) -8 B) -16 C) $\frac{1}{8}$ D) $\frac{1}{16}$</p> |
| <p>25) Which number is NOT a perfect square?</p> <p>A) 81 B) 111 C) 121 D) 225</p> | <p>26) Which number is $\sqrt{441}$?</p> <p>A) 20.1 B) 21 C) 41 D) 44</p> |
| <p>27) $(6)^3 \cdot (6^4)^2 =$ <i>Show work!</i></p> <p>A) 6^9 B) 6^{11} C) 6^{24} D) 3^{68}</p> | <p>28) $20 - 3^2 =$</p> <p>A) 11 B) 14 C) 168 D) 289</p> |
| <p>29) Write 402,000,000 in scientific notation.</p> <p>A) 4.02×10^8 B) 4.02×10^{-8} C) 40.2×10^7 D) 40.2×10^{-9}</p> | <p>30) $(9^2 \cdot 9^6) \div (9^4 \cdot 9^2)$ <i>Show work!</i></p> <p>A) 5 B) 1^2 C) 9^{14} D) 9^2</p> |
| <p>31) $(2^4)^5 =$</p> <p>A) 2^{-1} B) 2^{20} C) 2^9 D) 1^9</p> | <p>32) Which shows an equivalent expression? <i>Show work!</i></p> $\frac{8^6 \cdot 8^3 \cdot 8^5}{8^9 \cdot 8^6}$ <p>A) 8 B) 7 C) 1 D) $\frac{1}{8}$</p> |