Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Math 8

**ESTIMATING AND COMPARING RATIONAL AND IRRATIONAL NUMBERS**

Problems 1 – 6, identify as either rational, irrational, or not real and explain why.

1. ½

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1. π

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1. √3

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1. 7

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1. 0.232323…

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1. √ - 100

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Problems 7 – 14, compare the numbers and fill in the appropriate symbol using <, >, or =.

1. √3\_\_\_\_\_ 1.7 11. √7 \_\_\_\_\_ 2 2/3
2. 5 \_\_\_\_\_ √30 12. √11 \_\_\_\_\_ 3
3. 4.03 \_\_\_\_\_ √17 13. √6.25 \_\_\_\_\_ 2.5
4. 3√64 \_\_\_\_\_ √16 14. 3√100 \_\_\_\_\_ √100

Problems 15 – 22, identify what two integers the numbers fall between.

15. √30 19. √53

16. √76 20 - √5

17. - √11 21. √113

18. 3√33 22. 3√146

Problems 23 - 27, place the following numbers on a number line from least to greatest.

23. √30, 6, 5

24. √5, 2.2, 2.25, 2.2

25. √5, √6, 2.5, 2.55,

26. – 7, - √60, - 7 ,

27. – 4.5, - √17, - 4.1, - 4.08