Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**9.15.16 HOMEWORK – Rational Questions**

1. [*π*  is  and its decimals  repeating pattern.](http://www.helpteaching.com/questions/246413/pi-pi-is-and-its-decimals-repeating-pattern)
2. finite; have no
3. finite; have a
4. infinite; have no
5. infinite; have a
6. [Identify the set of numbers that best describes the situation.
The cost of an item at a store](http://www.helpteaching.com/questions/72593/identify-the-set-of-numbers-that-best-describes-the-situatio)
7. rational numbers
8. whole numbers
9. integers
10. irrational numbers
11. [Which of the following best describes −  √-3 ?](http://www.helpteaching.com/questions/125946/which-of-the-following-best-describes-sqrt3)
12. whole and irrational
13. whole and rational
14. real and irrational
15. real and rational
16. [Choose the number that is irrational.](http://www.helpteaching.com/questions/158002/choose-the-number-that-is-irrational)
17. √123
18. 88/41
19. √43
20. 23/69
21. [Which of the following is NOT a characteristic of all rational numbers?](http://www.helpteaching.com/questions/320019/which-of-the-following-is-not-a-characteristic-of-all-ration)
22. They are integers
23. They can continue on for forever with no pattern
24. They must be a perfect square root
25. They are a fraction
26. [Which number is irrational?](http://www.helpteaching.com/questions/103653/which-number-is-irrational)
27. 3.7
28. 1/4
29. .25
30. 1.23124125126127...

OVER 🡪

1. Put a check mark for **each set** that the number is a part of:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|   | Whole Numbers | Integers | Rational Numbers | Irrational Numbers | Real Numbers |
| -7 |  |  |  |  |  |
| ¾  |  |  |  |  |  |
|  |  |  |  |  |  |
| 5 |  |  |  |  |  |
| 0.398 |  |  |  |  |  |

1. List the numbers in the set  that are: (hint: some numbers may be in more than one category)

Whole numbers

Integers

Rational numbers

Irrational numbers

Real numbers