

Name: $\qquad$ Period: $\qquad$

SM2 4.1—Number Theory and Divisibility Rules

1. In your own words, explain how to tell whether a real number is rational or irrational.

Identify all of the following number systems that each number belongs to: natural numbers, whole numbers, integers, rational numbers, irrational numbers, real numbers, imaginary numbers, complex numbers.
2. 0
3. $\frac{3}{4}$
4. -14
5. $\sqrt{2}$
6. $0 . \overline{352}$
7. $\sqrt{36}$
8. $-\pi$
9. $\sqrt{-25}$

Determine if the number is divisible by $2,3,4,5,6,8,9,10$. Write all that apply.
10. 15
11. 72
12. 400
13. 120
14. 49
15. 144
16. 24
17. 13

