

HW 1.1: Rational and Irrational Numbers

Date: _____

Determine if the number is rational (R) or irrational (I).

- 1) 61π
- 2) 42
- 3) $75.082\overline{106}$
- 4) $\sqrt{101}$
- 5) $65.42\overline{79}$
- 6) $\frac{20}{6}$
- 7) π
- 8) $5.62\overline{13}$
- 9) $\frac{98}{16}$
- 10) 39
- 11) 89.396668...
- 12) $\sqrt{17}$
- 13) 67.714813...
- 14) $\sqrt{64} = 8$
- 15) $\frac{1}{4}$
- 16) $\sqrt{25} = 5$
- 17) $71.5\overline{186}$
- 18) $\frac{7}{54}$
- 19) 20.455566...
- 20) 97.33997

Answers

1. I
2. R
3. R
4. I
5. R
6. R
7. I
8. R
9. R
10. R
11. I
12. I
13. I
14. R
15. R
16. R
17. R
18. R
19. I
20. R

Complete the chart.

FRACTION	DECIMAL	PERCENT
$\frac{1}{4}$	0.25	25%
$\frac{4}{5}$	0.8	80%
$\frac{70}{100} = \frac{7}{10}$	0.7	70%
$\frac{3}{10}$	0.3	30%
$\frac{9}{10}$	0.9	90%
$\frac{24}{100} = \frac{6}{25}$	0.24	24%
$\frac{60}{100} = \frac{6}{10}$	0.6	60%
$\frac{20}{100} = \frac{2}{10} = \frac{1}{5}$	0.2	20%
$\frac{14}{100} = \frac{7}{50}$	0.14	14%
$\frac{1}{8}$	0.125	12.5%
$\frac{79}{100}$	0.79	79%
$\frac{86}{100} = \frac{43}{50}$	0.86	86%
$\frac{36}{100} = \frac{9}{25}$	0.36	36%
$\frac{3}{4}$	0.75	75%
$\frac{45}{100} = \frac{9}{20}$	0.45	45%
$\frac{375}{1000} = \frac{15}{40} = \frac{3}{8}$	0.375	37.5%
$\frac{2}{3}$	$0.\overline{6}$	66.7% or 67%