

Name:

ANSWERS!

Class:



Communication



Successful Partnership



Encouragement



Solving Problem Together



Collaboration

Classify each of the below either "R" for a rational number or "I" for an irrational number.

5 (R)

-2 (R)

0 (R)

-0.2 (R)

-1 (R)

$\sqrt{0.25}$ (R) = 0.5

$\frac{1}{3}$ (R)

$\sqrt{\frac{1}{9}}$ (R) = $\frac{1}{3}$

$0.\bar{3}$ (R)

same!

$-2.\bar{54}$ (R)

Repeating decimals are ALWAYS Rational

$\sqrt{\frac{25}{49}}$ (R) = $\frac{5}{7}$

$\sqrt{50}$ (I)

$\sqrt{\frac{16}{100}}$ (R) = $\frac{4}{10}$

$\sqrt{49}$ (R) = 7

ALWAYS Rational

$\sqrt{48}$ (I)

(I) → Square roots of non-perfect squares are irrational

$3\sqrt{100}$ (R) $3 \cdot 10 = 30$

$\sqrt{\frac{81}{99}}$ (I)

$\sqrt{33}$ (I)

-0.6 (R)

$$\sqrt[3]{27} \text{ (R)} = 3$$

$$\sqrt[3]{30} \text{ (I)}$$

$$-9 \text{ (R)}$$

π (I) π is IRRATIONAL

$$9\pi \text{ (I)}$$

$$\frac{1}{2} \text{ (R)}$$

$$-\frac{10}{7} \text{ (R)}$$

$$4\frac{2}{3} \text{ (R)}$$

$$4.\bar{6} \text{ (R)}$$

$$-2.\bar{54} \text{ (R)}$$

$$\sqrt{10} \text{ (I)}$$

$$1,200,000 \text{ (R)}$$

$$\sqrt[3]{8} \text{ (R)} = 2$$

$$\sqrt{8} \text{ (I)}$$

$$\sqrt[3]{0.1} \text{ (I)}$$

$$\sqrt[3]{0.001} \text{ (R)} = 0.1$$

$$\sqrt{\frac{9}{64}} \text{ (R)} = \frac{3}{8}$$

$$\sqrt{\frac{3}{9}} \text{ (I)}$$

$$\sqrt{\frac{4}{100}} \text{ (R)} = \frac{2}{10}$$

$$\frac{\pi}{2} \text{ (I)}$$

$$\sqrt{\pi} \text{ (I)}$$

$$\pi^2 \text{ (I)}$$

$$-\frac{1}{4} \text{ (R)}$$

$$\frac{11}{7} \text{ (R)}$$

$$\sqrt{\frac{36}{55}} \text{ (I)}$$