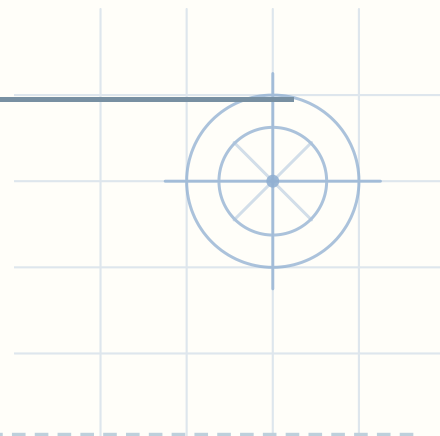


Rational or irrational — Every kind of number

Name: _____

Date: _____

Is each number rational or irrational? Circle one.



1 π Rational / Irrational

2 $8/11$ Rational / Irrational

3 0.742 Rational / Irrational

4 $\sqrt{441}$ Rational / Irrational

5 $0.505050\dots$ Rational / Irrational

6 $\sqrt{224}$ Rational / Irrational



Rational or irrational · Every kind of number — Answer key

1. π : irrational — its digits never end and never repeat

2. $8/11$: rational — it is already written as one whole number over another

3. 0.742 : rational — a decimal that stops can be written over a power of ten

4. $\sqrt{441}$: rational — it is exactly 21, and any whole number counts as a fraction over one

5. $0.505050\dots$: rational — a decimal that repeats forever can still be written as a fraction

6. $\sqrt{224}$: irrational — 224 is not a perfect square, so its root never ends and never repeats

