

Chapter: 1-1 RATIONAL AND IRRATIONAL NUMBERS

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Search these two video clips from Khan Academy.

- **Introduction to rational and irrational numbers**
- **Recognizing irrational numbers**

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<https://www.khanacademy.org/math/pre-algebra/order-of-operations/rational-irrational-numbers/v/recognizing-irrational-numbers>



Task

- 1) Watch the videos as many times as you like.
 - 2) Do the practice questions on 'Recognizing rational and irrational numbers'
 - 3) Then answer questions 1 to 4 giving a detailed reason for choosing rational or irrational.
 - 4) Print or write out your answers ready to submit in one week.
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1)

Indicate whether each number is rational or irrational.
Explain the reason for your choice.

	Rational	Irrational	Explanation
$1\frac{1}{8}$	<input type="radio"/>	<input type="radio"/>	
1.111	<input type="radio"/>	<input type="radio"/>	
$3\sqrt{2}$	<input type="radio"/>	<input type="radio"/>	
$1.\bar{1} = 1.111...$	<input type="radio"/>	<input type="radio"/>	
$\sqrt{170}$	<input type="radio"/>	<input type="radio"/>	

2)

Indicate whether each number is rational or irrational.
Explain the reason for your choice.

	Rational	Irrational	Explanation
$-\frac{13}{12}$	<input type="radio"/>	<input type="radio"/>	
$\sqrt[3]{11}$	<input type="radio"/>	<input type="radio"/>	
$\sqrt{21}$	<input type="radio"/>	<input type="radio"/>	
$4\frac{2}{3}$	<input type="radio"/>	<input type="radio"/>	

3)

Indicate whether each number is rational or irrational.
Explain the reason for your choice.

	Rational	Irrational	Explanation
$\sqrt{3}$	<input type="radio"/>	<input type="radio"/>	
0.732	<input type="radio"/>	<input type="radio"/>	
$\sqrt{35}$	<input type="radio"/>	<input type="radio"/>	
$\frac{0.31}{0.41}$	<input type="radio"/>	<input type="radio"/>	
$\sqrt{12}$	<input type="radio"/>	<input type="radio"/>	

4)

Indicate whether each number is rational or irrational.
Explain the reason for your choice.

	Rational	Irrational	Explanation
$\frac{95}{4}$	<input type="radio"/>	<input type="radio"/>	
$0.\overline{357} = 0.357357...$	<input type="radio"/>	<input type="radio"/>	
$\frac{\sqrt{7}}{3}$	<input type="radio"/>	<input type="radio"/>	
$\pi - 1$	<input type="radio"/>	<input type="radio"/>	
$-\sqrt{5}$	<input type="radio"/>	<input type="radio"/>	