

8.NS.1 & 8.NS.2 Check-Up

Name _____ Date _____

5. Select the box in each row to identify the number as rational or irrational.

	Rational	Irrational
$\frac{13}{90}$	<input type="radio"/>	<input type="radio"/>
$\sqrt{84}$	<input type="radio"/>	<input type="radio"/>
$\frac{4}{11}$	<input type="radio"/>	<input type="radio"/>
12π	<input type="radio"/>	<input type="radio"/>
$4.\overline{63}$	<input type="radio"/>	<input type="radio"/>

10. Between which two consecutive rational numbers is each irrational number? Choose two consecutive rational numbers for each irrational number.

	1	2	3	4	5	6
π	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
$\sqrt{5}$	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
$\sqrt{17}$	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
$\sqrt{30}$	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Student	Value
Anson	$\sqrt{7}$
Beth	$\sqrt{35}$
Claudia	$\sqrt{60}$
Daniel	$\sqrt{83}$

3. Which student's value is between 6 and 8 on the number line?

4.
8. Match each irrational number with the two consecutive rational numbers between which it lies.

	√37	√55	π
3.14, 3.15	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6.08, 6.09	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
$\frac{22}{3}, \frac{23}{3}$	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8.NS.1 & 8.NS.2 Check-Up

$$\frac{\pi}{7'}, \frac{\sqrt{9}}{2'}, \frac{19}{13'}, \frac{9}{20'}, \sqrt{5}$$

5. Arrange the numbers in order from GREATEST TO LEAST.

6. Between what two numbers does the square root of 50 fall between?

7. Johanna calculated the length of a support wire to be $\sqrt{60}$ feet long.

Which is the *best approximation* for $\sqrt{60}$ feet?

- A. Between 7 and 8 feet
- B. 30 feet
- C. 1800 feet
- D. Between 59ft and 60ft

8. Maria claims she can throw a football 40π feet. Her friends try to guess the distance in feet and record their estimated ranges in the table.

Ricardo	Shakira	Jonathan	Lacy
123-124 feet	124-125 feet	125-126 feet	126-127 feet

Which friend is correct?

1. Which statement explains why $\sqrt{30}$ is considered an irrational number?

- A. When evaluated, $\sqrt{30}$ results in a repeating decimal, which is considered an irrational number.
- B. When evaluated, $\sqrt{30}$ results in a terminating decimal, which is considered an irrational number.
- C. When evaluated, $\sqrt{30}$ results in a nonterminating and nonrepeating decimal, which is considered an irrational number.
- D. When evaluated, $\sqrt{30}$ results in a whole number, which is considered an irrational number.