

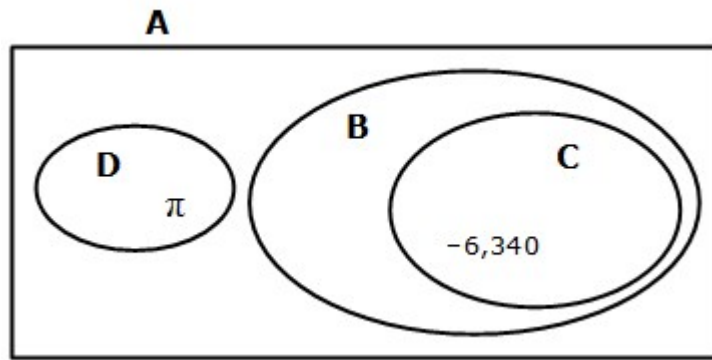
Sets and Subsets of Real Numbers

Some questions (c) 2017 by TEKS Resource System.

Some questions (c) 2017 by The Texas Education Agency.

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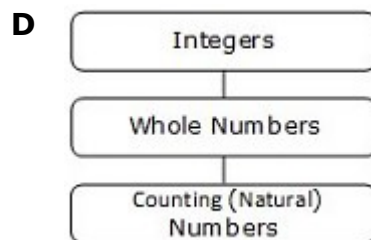
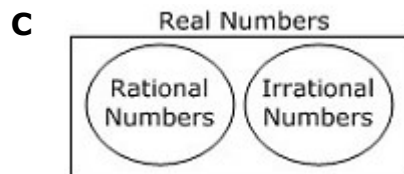
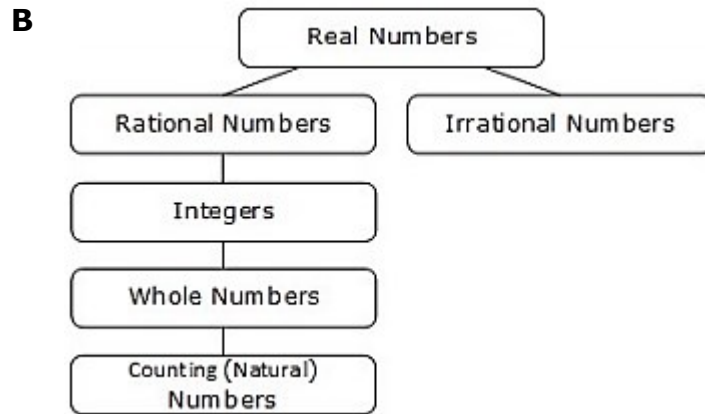
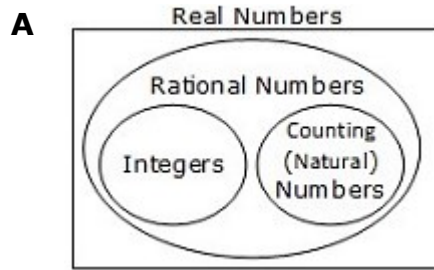
- 1 The visual representation describes the relationships between the sets and subsets of numbers.



Which number set represents Section A in the Venn diagram?

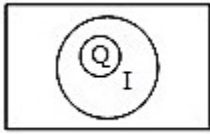
- A** Integers
- B** Irrational Numbers
- C** Rational Numbers
- D** Real Numbers

2 Which representation does NOT describe the relationships between the subsets of real numbers?



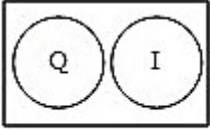
3 Which Venn diagram correctly describes the relationship between the set of Rational Numbers, Q , and the set of Irrational Numbers, I ?

A



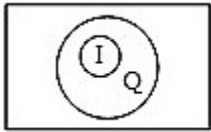
, because all rational numbers are irrational numbers

B



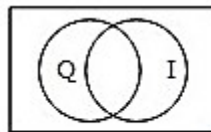
, because rational and irrational numbers have no elements in common

C



, because all irrational numbers are rational numbers

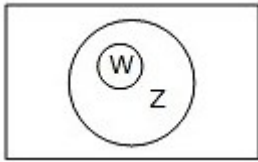
D



, because some rational numbers are not irrational numbers

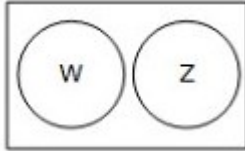
4 Which Venn diagram correctly describes the relationship between the set of Integers, Z , and the set of Whole Numbers, W ?

A



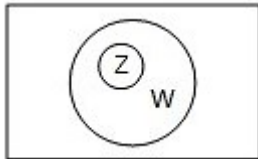
, because all whole numbers are integers

B



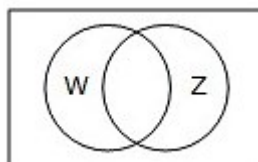
, because whole numbers and integers have no elements in common

C



, because all integers are whole numbers

D

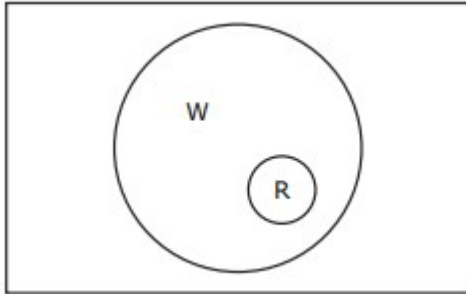


, because some whole numbers are not integers

5 Which Venn diagram correctly describes the relationship between Set R and Set W?

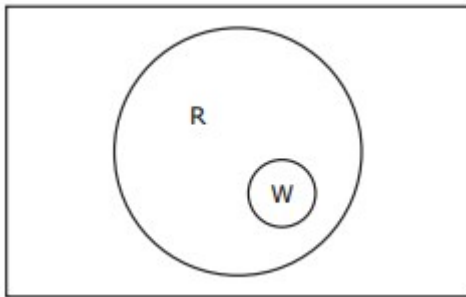
$R = \{\text{real numbers}\}$
 $W = \{\text{whole numbers}\}$

A



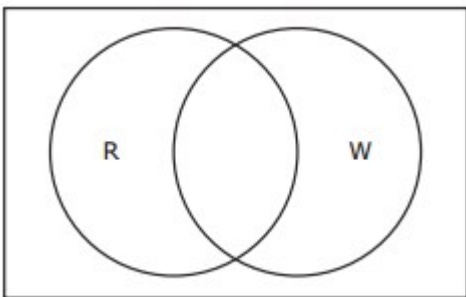
, because all real numbers are whole numbers

B



, because all whole numbers are real numbers

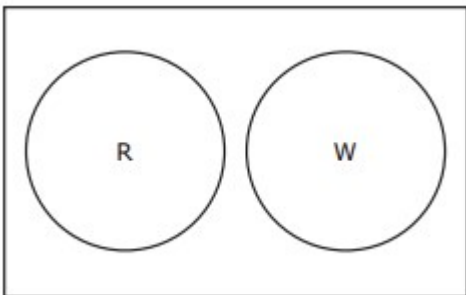
C



, because some whole numbers are not real

numbers

D



, because whole numbers and real numbers have

no elements in common

6 Which of the following numbers is an irrational number?

A $\frac{3}{4}$

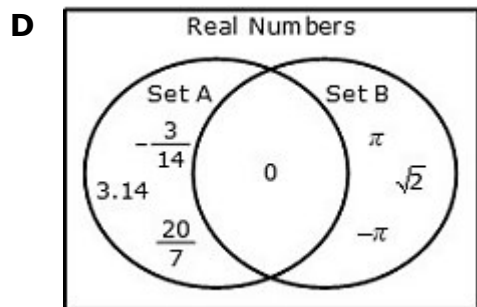
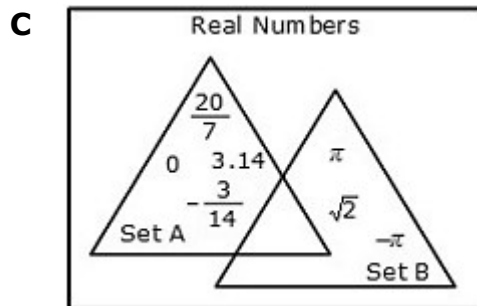
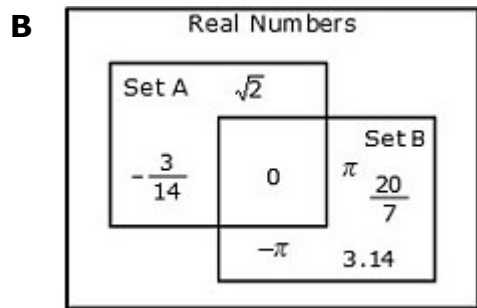
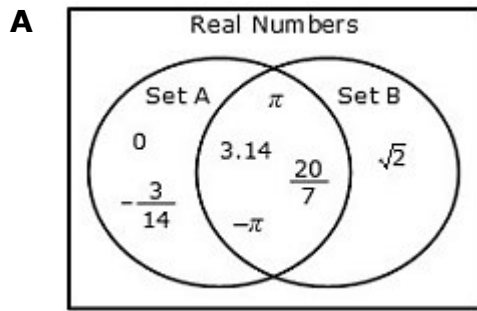
B $\sqrt{225}$

C $\sqrt{17}$

D 175.2845

- 7 Set A represents the set of Rational Numbers and set B represents the set of Irrational Numbers.

Which visual representation shows correct number placement in the sets and subsets of real numbers?



- 8** Which statement is false?
- A** All Integers are Rational.
 - B** All Rational numbers are real numbers.
 - C** All Irrational numbers are real numbers.
 - D** All Irrational numbers are Rational.