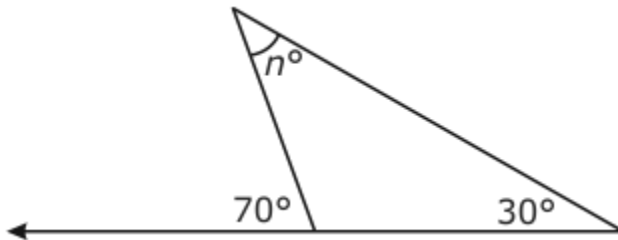


Unit 6 Real Numbers Review

1. The areas of 4 different squares are listed below. Which area represents a square with a side length that is a rational number?

- A. 24 square feet
- B. 36 square feet
- C. 48 square feet
- D. 72 square feet

2. What is the value of n in the figure below?

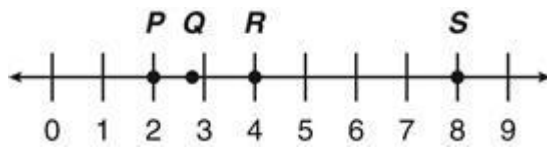


3. The value of $\sqrt{29}$ falls between which two integers?
4. Which is an irrational number?

- A. $\sqrt{49}$
- B. 5.6
- C. $\frac{\sqrt{10}}{2}$
- D. $\frac{4}{5}$

5. The area of a square is $\frac{9}{121}$ square yards. What is the length of each side of the square?

6. Which point most closely corresponds to $\sqrt{8}$ on the number line below?



7. Which function is nonlinear?

A. $Y = \frac{3x+1}{2}$

C. $Y = 2x(x-2)$

D. $Y = \frac{1}{2}x - 2$

B. $Y = -x$

8. When 8 is added to the number that is produced by doubling the number x , the result is equal to 8 times the number that is 5 less than x . What is the value of x ?

9. Which phrase does not describe a rational number?

A. integer number

B. repeating decimal

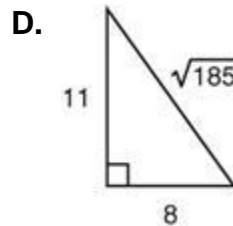
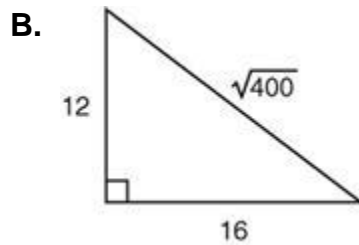
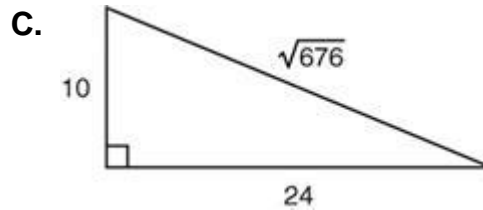
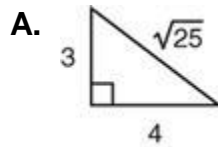
C. terminating decimal

D. non-repeating, non-terminating decimal

10. What is the **approximate** difference between $\sqrt{120}$ and $\sqrt{80}$?

11. Sam made a square sign with an area of 410 square inches. What is the **approximate** perimeter of the square sign?

12. Which triangle has an irrational number as one of its side lengths?



13. Which phrase does not describe a rational number?

- A. integer number
- B. repeating decimal
- C. terminating decimal
- D. non-repeating, non-terminating decimal

14. Which fraction is equivalent to $0.\bar{6}$?

15. Which fraction is equivalent to $0.\bar{4}$?

16. $\sqrt{136}$ is between which two integers?

17. If the volume of a cube is 125 cubic inches, what is the length of each side of the cube.

18. What value of x satisfies the equation $\frac{-4x - 2}{3} = -6$?

19. What fraction is equivalent to $0.\bar{55}$?

20. Which set of numbers are all irrational numbers?

- A. $\{\pi, \sqrt{2}, \sqrt{9}\}$
- B. $\{-3, \frac{-2}{7}, \sqrt{16}\}$
- C. $\{\sqrt{8}, \sqrt{12}, \sqrt{17}\}$
- D. $\{\sqrt{25}, \sqrt{36}, \sqrt{49}\}$

21. A square table has an area of 60 square feet. Between which two consecutive integers is the length of the table?

22. In which choice do all the points lie on the same line?

- A. (0, -2), (1, -1), (2, 2), (3, 7)
- B. (0, 0), (1, 1), (2, 4), (3, 9)
- C. (0, 0), (1, 1), (2, 8), (3, 27)
- D. (0, 0), (1, 2), (2, 4), (3, 6)

23. What is the sum of all of the integers between $\sqrt{19}$ and $\sqrt{77}$?

24. What is the approximate value of $\sqrt{24} + \sqrt{48}$?

25. The square below has an area of 29 square units.



The length of each side is between which 2 integers?