



**THIRD SPACE
LEARNING**

Types of Numbers Worksheet

Number and Quantity

Grades 6 to 8

Skill Questions

Name:

Date:

- 1 Circle the integers.

-4 5.1 0 $\frac{3}{4}$ $4\frac{7}{8}$ -23.5

Answer

- 2 Circle the rational numbers.

$\frac{1}{11}$ 0.91 0 $2\frac{5}{7}$ -9 -1.03

Answer

- 3 What is the reciprocal of $\frac{7}{8}$?

Answer

- 4 What is the absolute value of $5\frac{1}{2}$?

Answer

- 5 Show the opposite of -4.5 on the number line.



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- 6 Write $4 \times 4 \times 4 \times 4 \times 4 \times 5 \times 5$ as an exponential expression.

Answer

- 7 Solve for x .

$$13^3 = x$$

Answer

- 8 Circle the irrational numbers.

$$-\pi \quad \frac{9}{7} \quad -0 \quad \sqrt{100} \quad \sqrt[3]{27} \quad \sqrt{10}$$

Answer

- 9 Show $0.\overline{2}$ as a fraction.

Answer

- 10 Approximated $\sqrt{5}$ on the number line.



Applied Questions

- 11 The temperature in a city was 5°C in the morning. By midnight, the temperature dropped to -8°C . Plot both values on the number line.



- 12 Name 3 rational numbers between $\frac{1}{3}$ and $\frac{1}{2}$. Explain how you solved.

- 13 A small plant doubles its height every year. If the plant is 2 inches tall at the end of its first year. Write an expression to represent the height of the plant at the end of the n th year. Explain one example of the expression within the context.

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14 Decide whether x is rational or irrational in each expression.

a. $\pi + \pi = x$

Answer

b. $\pi - \pi = x$



Answer

c. $\frac{\pi}{\pi} = x$





Answer

15 Name 2 irrational numbers between 2 and 4. Explain how you solved.

Answers

Question number	Question	Answers	Standard
1	Circle the integers. -4 5.1 0 $\frac{3}{4}$ $4\frac{7}{8}$ -23.5	-4, 0	6.NS.C.6
2	Circle the rational numbers. $\frac{1}{11}$ 0.91 0 $2\frac{5}{7}$ -9 -1.03	All the numbers	6.NS.C.6
3	What is the reciprocal of $\frac{7}{8}$?	$\frac{8}{7}$	6.NS.A.1
4	What is the absolute value of $5\frac{1}{2}$?	$5\frac{1}{2}$	6.NS.C.7
5	Show the opposite of -4.5 on the number line. 		6.NS.C.6
6	Write $4 \times 4 \times 4 \times 4 \times 4 \times 5 \times 5$ as an exponential expression.	$4^5 \times 5^2$	6.EE.A.1
7	Solve for x . $13^3 = x$	$x = 2,197$	6.EE.A.1
8	Circle the irrational numbers. $-\pi$ $\frac{9}{7}$ $\sqrt{100}$ $\sqrt[3]{27}$ $\sqrt{10}$	$-\pi, \sqrt{10}$	8.NS.A.1
9	Show $0.\bar{2}$ as a fraction.	$\frac{2}{9}$	8.NS.A.1

Types of Numbers Worksheet | Grades 6 to 8 | Answers

Question number	Question	Answers	Standard
10	<p>Approximated $\sqrt{5}$ on the number line.</p> 		8.NS.A.2
11	<p>The temperature in a city was 5°C in the morning. By midnight, the temperature dropped to -8°C. Plot both values on the number line.</p> 		6.NS.C.6
12	<p>Name 3 rational numbers between $\frac{1}{3}$ and $\frac{1}{2}$. Explain how you solved.</p>	<p>Answers will vary. Example answer: I know that $\frac{1}{3} = \frac{10}{30}$ and $\frac{1}{2} = \frac{15}{30}$. So the fractions $\frac{11}{30}, \frac{12}{30}$ and $\frac{13}{30}$ are all between $\frac{1}{3}$ and $\frac{1}{2}$.</p>	6.NS.C.6
13	<p>A small plant doubles its height every year. If the plant is 2 inches tall at the end of its first year. Write an expression to represent the height of the plant at the end of the nth year. Explain one example of the expression within the context.</p>	<p>2^n Explanations will vary. Example answer: For the fourth year, the height of the plant is $2 \times 2 \times 2 \times 2$ or 2^4 inches.</p>	6.EE.A.1

Types of Numbers Worksheet | Grades 6 to 8 | Answers




Question number	Question	Answers	Standard
14	Decide whether x is rational or irrational in each expression. a. $\pi + \pi = x$ b. $\pi - \pi = x$ c. $\frac{\pi}{\pi} = x$	a. Irrational ($x = 2\pi$) b. Rational ($x = 0$) c. Rational ($x = 1$)	8.NS.A.1
15	Name 2 irrational numbers between 2 and 4. Explain how you solved.	Answers will vary. Example answer: is around 3.14, which is between 2 and 4. $\sqrt{6}$ is also between 2 ($\sqrt{4}$) and 4 ($\sqrt{16}$).	8.NS.A.2

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