

Math 9

1a.1 Practice

1. Are the following numbers part of the set of whole numbers (W), integers (I), Rational numbers (Rat), and/or Irrational numbers (Irr). Give all that apply.

a. 0.013

b. 0.666.....

c. 0.212121

d.  $\sqrt{7}$

e.  $\frac{\sqrt{4}}{\sqrt{81}}$

d.  $\frac{51}{17}$

2. Arrange the numbers from smallest to largest:

$3.4, -\frac{11}{3}, -3.4, -3.5$

3. Place the following numbers on a number line:

$3.1, -\frac{13}{12}, \sqrt{6}, -\sqrt{16}, 2\frac{5}{8}$

4. Express each term as a fraction

a. 0.17

b.  $0.\bar{5}$

c.  $1\frac{2}{3}$

5. List all integers greater than -4 and less than 0.5

1a.2 Practice

1. Use factoring to find the square root of the following numbers.

2. Use factoring to solve the equation.

a.  $x^2 = 36$

b.  $x^2 = 121$

c.  $x^2 + 1 = 17$

3. Find the square root to the nearest hundredth using a calculator.

a.  $\sqrt{32}$

b.  $\sqrt{101}$

c.  $\sqrt{0.25}$

4. Solve the equation to two decimal places using a calculator.

a.  $x^2 = 39$

b.  $x^2 = 50$

$x^2 = 0.00625$

5. Find the missing side of the right triangle:

a.  $a = 8, b = 10$

b.  $a = 12, c = 13$

6. What is the length of one side of a square with area = 55 cm<sup>2</sup>?

7. What is the straight line distance between the two opposite corners of a square with side length = 28.4 m?

8. What is the radius of the circle?

a.  $A = 64.5 \text{ cm}^2$

b.  $A = 1.005 \text{ m}^2$