

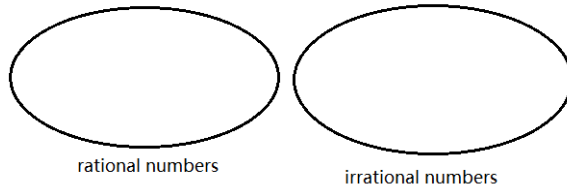
Grade 7 Bilingual Math worksheet: Real number 2

Name: _____

Score: _____ (Due: 26 Aug.)

1. Put all the following numbers into the right set.

$\sqrt[3]{2}$, $\frac{1}{4}$, $\sqrt{7}$, $-\frac{5}{2}$, $\sqrt{2}$, $\sqrt{\frac{20}{3}}$, $-\sqrt{5}$, $-\sqrt[3]{8}$, $\sqrt{\frac{4}{9}}$, 0, 0.3737737773..., 1.71717171...



2. Fill the blanks

- (1) the square of a number is 256, then the number is _____
- (2) the volume of a cube is 125 cm^3 , then the length of each edge is _____
- (3) the principal square root of 25 is _____
- (4) the square root of 16 is _____ and _____, they are _____ number for each other.

3. Calculate for each of the following

(1) $\sqrt[3]{\frac{125}{8}}$

(2) $\sqrt{(-5)^2}$

(3) $\sqrt[3]{(-5)^3}$

(4) $(\sqrt[3]{-5})^3$

(5) $\sqrt[3]{-1}$

4. Find the opposite number, reciprocal number and absolute value for each of the following

$$5, -\pi, \frac{2}{3}, -2.5, \sqrt[3]{-8}$$

6. Compare the following pairs, put $<$, $>$ or $=$ in the blank

(1) $\sqrt{50}$ ___ 7

(2) $\frac{\sqrt{5}-1}{2}$ ___ $\frac{1}{2}$

(3) $\sqrt[3]{30}$ ___ 3

7. The radius of a circle is 1cm, if there is a square whose area equals to the area of the circle. Get the length of the edge for that square.

8. For a number a , its square equals to itself, get all the possible value for a .

9. Find all the integers between $-\sqrt{2}$ and $\sqrt{11}$.

10. Let's consider summation of two irrational numbers, such as $\sqrt{2}+\sqrt{3}$, $\pi - \frac{\pi}{2}$, $\sqrt{8} - \sqrt{2}$, all of results are irrational numbers. Is this true for all the summation of two irrational numbers? If not, can you give me an example?