

Revision : 1

1. Answer the following questions with correct option given below :

- (1) The digit at unit place of a number is 7, then what will be the digit at unit place of the number obtained by cubing it.
(a) 1 (b) 3 (c) 7 (d) 9
- (2) Which number from the following is perfect cube ?
(a) 2197 (b) 980 (c) 373 (d) 3555
- (3) The digit at unit place of a perfect cube number is 2, then what will be the digit at unit place of the number by getting its cube root.
(a) 2 (b) 4 (c) 8 (d) 6
- (4) What is the additive inverse (opposite) of $\frac{3}{7}$?
(a) 0 (b) $\frac{7}{3}$ (c) $\frac{-7}{3}$ (d) $\frac{-3}{7}$
- (5) How can $3\frac{5}{6}$ be written in $\frac{p}{q}$ form ?
(a) $\frac{18}{6}$ (b) $\frac{23}{6}$ (c) $\frac{33}{6}$ (d) $\frac{6}{23}$
- (6) If $x^2 \times q = 1$, then $q = \dots\dots\dots$?
(a) x (b) x^0 (c) x^2 (d) x^{-2}
- (7) What is the simplified form of $\left(\frac{1}{2}\right)^{-3}$?
(a) 3 (b) 8 (c) (-8) (d) $\left(\frac{-1}{8}\right)$
- (8) If $8^x = 64$, then $x = ?$
(a) 2 (b) 4 (c) 8 (d) 16

2. Fill in the blanks :

- (1) A number having digit 2 at unit place, then its cube has digit at its unit place.

Revision : 1

- (2) The cube root of 42,875 is (find by assuming not by calculation).
- (3) $3^2 \times 3^4 = 3^{\dots\dots}$
- (4) $5^6 \div 5^2 = 5^{\dots\dots}$
- (5) $(\dots\dots)^5 = 243$
- (6) The multiplication inverse (reciprocal) of $\frac{1}{7}$ is
- (7) $\frac{2}{5} + \left(\frac{-2}{5}\right) = \left(\frac{-2}{5}\right) + \dots\dots$.
- (8) $\left(\frac{-3}{8}\right) \times \dots\dots = \left(\frac{-3}{8}\right)$
- 3.** Which numbers are perfect cube from the following ? Verify.
 (1) 729 (2) 400 (3) 1000
- 4.** Multiplied by which the smallest number to 576 can we get the perfect cube number ?
- 5.** Classify the following number in positive rational number, negative rational number and zero rational number :
 $\frac{0}{5}, \frac{4}{7}, \left(\frac{-17}{2}\right), \frac{0}{15}, \left(\frac{-3}{8}\right), \frac{4}{19}, \frac{0}{25}, \frac{9}{25}, \left(\frac{-3}{23}\right)$
- 6.** Find the value : (1) $\left(\frac{27}{16}\right)^4 \div \left(\frac{9}{8}\right)^6$ (2) $[(9^2 \times 5^2) \div (3^2 \times 5)^2] \div \frac{1}{15}$
- 7.** Simplify : $(15x^6 \div 3x^4) \times 2x^2$
- 8.** Show $2\frac{3}{4}$, 1.5 and $\frac{-1}{2}$ on the number line.

Answers

- 1.** (1) b (2) a (3) c (4) d (5) b (6) d (7) b (8) a
- 2.** (1) 8 (2) 35 (3) 6 (4) 4 (5) 3 (6) 7 (7) $\frac{2}{5}$ (8) 1
- 3.** (1) Yes (2) No (3) Yes **4.** By 3
- 5.** Positive rational number : $\frac{4}{7}, \frac{4}{19}, \frac{18}{50}$ Negative rational number : $\left(\frac{-17}{2}\right), \left(\frac{-3}{8}\right), \left(\frac{-3}{23}\right)$
 Zero rational number : $\frac{0}{5}, \frac{0}{15}, \frac{0}{90}$
- 6.** (1) 4 (2) 15 **7.** $10x^4$