



RAMAGYA SCHOOL, NOIDA
OLYMPIAD WORKSHEET
CLASS – VIII

(Concept based)

1. If $x+0=0+x=x$ which is rational number, then 0 is
(A) additive identity (B) additive inverse of x
(C) multiplicative inverse of x (D) reciprocal of x
2. In the standard form of rational number, the common factor of numerator and denominator is always
(A) 0 (B) 1 (C) -1 (D) 2
3. A number which can be expressed as $\frac{p}{q}$ where p and q are integers then,
(A) $q=0$ (B) $q=1$ (C) $q \neq 0$ (D) $q \neq 1$
4. Find the value of x: $(3 \div 4)^{2x} \times (21 \div 28)^x = (36 \div 48)^6$
(A) 2 (B) 5 (C) 8 (D) 8
5. The standard form of $\frac{-48}{60}$ is
(A) $\frac{48}{60}$ (B) $-\frac{48}{60}$ (C) $\frac{-4}{5}$ (D) $\frac{4}{5}$

(Application based)

6. If $2^{n-1} + 2^{n+1} = 320$, then n is equal to _____.
(A) 7 (B) 6 (C) 5 (D) 8
7. The simplified form of $\frac{7}{8} \times \frac{3}{2} \times \frac{4}{7} \times \frac{7}{3}$
(A) 0 (B) 1 (C) 2 (D) $\frac{3}{7}$
8. $(\frac{3}{4})^{\text{th}}$ of a number is 20 more than half of the same number. The required number is _____.
(A) 50 (B) 80 (C) 90 (D) 180
9. Kartik can throw a ball $50\frac{3}{5}$ m high. Ayan can throw the same ball $48\frac{1}{3}$ m high. How much farther can Kartik throw the ball than Ayan?
(A) $2\frac{2}{15}$ m (B) $2\frac{4}{15}$ m (C) $2\frac{3}{5}$ m (D) $2\frac{4}{5}$ m

