

1. 다음 중 그 값이 두 번째로 큰 수를 구하시오.

$$\textcircled{\text{㉠}} \left(-\frac{1}{2}\right)^2 \times (-2)^3 \times (-1^{22})$$

$$\textcircled{\text{㉡}} -\left(-\frac{2}{3}\right)^2 \times (-1)^7$$

$$\textcircled{\text{㉢}} \left(\frac{1}{3}\right)^2 \times (-6)^2 \times (-1)^{23}$$

$$\textcircled{\text{㉣}} -\left(-\frac{3}{4}\right)^2 \times (-2)^3$$

▶ 답 :

▶ 정답 : $\textcircled{\text{㉠}}$

해설

$$\textcircled{\text{㉠}} \left(-\frac{1}{2}\right)^2 \times (-2)^3 \times (-1^{22}) = \frac{1}{4} \times (-8) \times (-1) = 2$$

$$\textcircled{\text{㉡}} -\left(-\frac{2}{3}\right)^2 \times (-1)^7 = -\left(\frac{4}{9}\right) \times (-1) = \frac{4}{9}$$

$$\textcircled{\text{㉢}} \left(\frac{1}{3}\right)^2 \times (-6)^2 \times (-1)^{23} = \frac{1}{9} \times 36 \times (-1) = -4$$

$$\textcircled{\text{㉣}} -\left(-\frac{3}{4}\right)^2 \times (-2)^3 = -\left(-\frac{9}{16}\right) \times (-8) = \frac{9}{2}$$

2. $2\frac{4}{7}$ 의 역수를 x , -0.75 의 역수를 y 라고 할 때, $\frac{x}{y}$ 를 구하면?

① $-\frac{7}{24}$

② $-\frac{3}{4}$

③ $-\frac{7}{18}$

④ $\frac{7}{18}$

⑤ $-\frac{4}{3}$

해설

$$2\frac{4}{7} = \frac{18}{7} \text{ 이므로}$$

$$x = \frac{7}{18}, -0.75 = -\frac{3}{4} \text{ 이므로 } y = -\frac{4}{3}$$

$$\therefore x \div y = \frac{7}{18} \div \left(-\frac{4}{3}\right) = \frac{7}{18} \times \left(-\frac{3}{4}\right) = -\frac{7}{24}$$

3. -1.6 의 역수와 $\frac{3}{2}$ 의 역수의 곱을 구하여라.

▶ 답 :

▷ 정답 : $-\frac{5}{12}$

해설

$$-1.6 = -\frac{16}{10} = -\frac{8}{5} \text{ 의 역수 : } -\frac{5}{8}$$

$$\frac{3}{2} \text{ 의 역수 : } \frac{2}{3}$$

$$\therefore \left(-\frac{5}{8}\right) \times \frac{2}{3} = -\frac{5}{12}$$

4. 다음을 계산하여 그 값이 큰 것부터 차례로 나열하면?

$$\text{㉠. } -\left(-\frac{1}{2}\right)^3 \times (-1)^5$$

$$\text{㉡. } \left(-\frac{1}{3}\right)^2 \times (-2^4) \times \left(\frac{1}{2}\right)^2$$

$$\text{㉢. } \left(-\frac{3}{4}\right)^2 \times (-2)^3 \times (-1)^{51}$$

$$\text{㉣. } \left(-\frac{2}{3}\right)^2 \times (-6^2) \times (-1)$$

① ㉠, ㉡, ㉢, ㉣

② ㉠, ㉣, ㉡, ㉢

③ ㉠, ㉢, ㉡, ㉣

④ ㉣, ㉢, ㉠, ㉡

⑤ ㉣, ㉢, ㉡, ㉠

해설

$$\text{㉠. } -\left(-\frac{1}{2}\right)^3 \times (-1)^5 = \frac{1}{8} \times (-1) = -\frac{1}{8}$$

$$\text{㉡. } \left(-\frac{1}{3}\right)^2 \times (-2^4) \times \left(\frac{1}{2}\right)^2 = \frac{1}{9} \times (-16) \times \frac{1}{4} = -\frac{4}{9}$$

$$\text{㉢. } \left(-\frac{3}{4}\right)^2 \times (-2)^3 \times (-1)^{51} = \frac{9}{16} \times (-8) \times (-1) = \frac{9}{2}$$

$$\text{㉣. } \frac{4}{9} \times (-36) \times (-1) = 16$$