Order of Operations (A)

1.
$$\left(\frac{5}{2} - 5\right) \times \frac{3}{2} \times \frac{1}{3} \div \left(-\frac{2}{3} - \frac{8}{3}\right)$$

2.
$$\left(-\frac{5}{3}\right) \div \left(\frac{2}{5} \div (-3)\right) \div (-1)^{-2+10}$$

3.
$$\frac{1}{2} \times (-1) \div 2 \times \left(-\frac{12}{5} + 9 - (-5)\right)$$

4.
$$\frac{11}{6} \times ((-10-1) \times \frac{1}{2} + 4) \div 7$$

5.
$$-1 + (-5) \times \frac{8}{5} \times (-\frac{7}{4}) - 3 \div \frac{7}{3}$$

Order of Operations (A) Answers

1.
$$\left(\frac{5}{2} - 5\right) \times \frac{3}{2} \times \frac{1}{3} \div \left(-\frac{2}{3} - \frac{8}{3}\right)$$

= $\frac{3}{8}$

2.
$$\left(-\frac{5}{3}\right) \div \left(\frac{2}{5} \div (-3)\right) \div (-1)^{-2+10}$$

= $\frac{25}{2}$

3.
$$\frac{1}{2} \times (-1) \div 2 \times \left(-\frac{12}{5} + 9 - (-5)\right)$$

= $-\frac{29}{10}$

4.
$$\frac{11}{6} \times ((-10-1) \times \frac{1}{2} + 4) \div 7$$

= $-\frac{11}{28}$

5.
$$-1 + (-5) \times \frac{8}{5} \times (-\frac{7}{4}) - 3 \div \frac{7}{3}$$

= $\frac{82}{7}$

Order of Operations (B)

1.
$$\frac{6}{5}^{1-(-8)+(-1)\times\frac{7}{3}\div\frac{1}{3}}$$

2.
$$\frac{6}{5} \times \frac{5}{4} \times \frac{2}{5} \times \left(2 + \frac{9}{2}\right) - 1$$

3.
$$(2^6)^1 - 3^{-\frac{5}{3} - (-\frac{11}{3})}$$

4.
$$\left(1 \div \frac{5}{2}\right)^2 - \frac{7}{2} \div \left(\frac{10}{3} \times \left(-\frac{3}{4}\right)\right)$$

5.
$$(-4) \times 4 \div \left(\frac{11}{3} \div \left(-\frac{7}{4}\right)\right) + \left(-\frac{2}{3}\right) - 4$$

Order of Operations (B) Answers

1.
$$\frac{6}{5}^{1-(-8)+(-1)\times\frac{7}{3}\div\frac{1}{3}}$$

= $\frac{36}{25}$

2.
$$\frac{6}{5} \times \frac{5}{4} \times \frac{2}{5} \times \left(2 + \frac{9}{2}\right) - 1$$

= $\frac{29}{10}$

3.
$$(2^6)^1 - 3^{-\frac{5}{3} - (-\frac{11}{3})}$$

= 55

4.
$$\left(1 \div \frac{5}{2}\right)^2 - \frac{7}{2} \div \left(\frac{10}{3} \times \left(-\frac{3}{4}\right)\right)$$

= $\frac{39}{25}$

5.
$$(-4) \times 4 \div \left(\frac{11}{3} \div \left(-\frac{7}{4}\right)\right) + \left(-\frac{2}{3}\right) - 4$$

= $\frac{98}{33}$

Order of Operations (C)

1.
$$\frac{7}{2} \times 1 \times (-1) \times 1 \times (-3) \div \left(-\frac{11}{3}\right)$$

2.
$$\left(\frac{2}{3} \div 1 \div 4 + \left(-\frac{1}{2}\right)\right) \times (-8) \times \frac{6}{5}$$

3.
$$\left(-\frac{4}{3}\right)^{\left(-\frac{3}{2}\right)\div\left(-\frac{3}{4}\right)} + \left(\frac{1}{2}\times1\right)^2$$

4.
$$\left(-\frac{1}{2}\right) \div 1 - \left(3 - \left(-\frac{7}{6}\right)\right) - \left(1 - \frac{5}{6}\right)$$

5.
$$(-5+2) \times ((-1)^3)^4 - (-\frac{1}{2})$$

Order of Operations (C) Answers

1.
$$\frac{7}{2} \times 1 \times (-1) \times 1 \times (-3) \div \left(-\frac{11}{3}\right)$$

= $-\frac{63}{22}$

2.
$$\left(\frac{2}{3} \div 1 \div 4 + \left(-\frac{1}{2}\right)\right) \times (-8) \times \frac{6}{5}$$

= $\frac{16}{5}$

3.
$$\left(-\frac{4}{3}\right)^{\left(-\frac{3}{2}\right)\div\left(-\frac{3}{4}\right)} + \left(\frac{1}{2}\times1\right)^2$$

= $\frac{73}{36}$

4.
$$\left(-\frac{1}{2}\right) \div 1 - \left(3 - \left(-\frac{7}{6}\right)\right) - \left(1 - \frac{5}{6}\right)$$

= $-\frac{29}{6}$

5.
$$(-5+2) \times ((-1)^3)^4 - (-\frac{1}{2})$$

= $-\frac{5}{2}$

Order of Operations (D)

1.
$$\frac{7}{4} - \left(\left(-\frac{3}{2}\right) \div \left(-1\right)^4\right)^{(-2)^2}$$

2.
$$\left(\frac{4}{5} - \frac{1}{3} \times 3 - (-4 - 2)\right) \times (-1)$$

3.
$$\frac{5}{6} + 2 \times 5 - \left(-1 + \frac{2}{3}\right) + \left(-\frac{9}{2}\right)$$

4.
$$(-1)^{\left(-\frac{4}{3}\right)\times(1+(-6))+4\times\frac{7}{3}}$$

5.
$$\frac{5}{3}^{(-1)^3+1} + (-4) - \frac{7}{3}$$

Order of Operations (D) Answers

1.
$$\frac{7}{4} - \left(\left(-\frac{3}{2}\right) \div \left(-1\right)^4\right)^{\left(-2\right)^2}$$

= $-\frac{53}{16}$

2.
$$\left(\frac{4}{5} - \frac{1}{3} \times 3 - (-4 - 2)\right) \times (-1)$$

= $-\frac{29}{5}$

3.
$$\frac{5}{6} + 2 \times 5 - \left(-1 + \frac{2}{3}\right) + \left(-\frac{9}{2}\right)$$

= $\frac{20}{3}$

4.
$$(-1)^{\left(-\frac{4}{3}\right)\times(1+(-6))+4\times\frac{7}{3}}$$

= 1

5.
$$\frac{5}{3}^{(-1)^3+1} + (-4) - \frac{7}{3}$$

= $-\frac{16}{3}$

Order of Operations (E)

1.
$$2^{-\frac{1}{2}-\frac{5}{4}^2+\left(-\frac{3}{2}\right)^4}$$

2.
$$2 \times \left(-\frac{7}{3}\right) - \left(-1 + \left(-4\right) - \left(1 - 12\right)\right)$$

3.
$$\frac{8}{3} \times \left(\frac{7^2}{2} - \left(-\frac{3}{2}\right)\right) \div \left((-3) \div \frac{4}{5}\right)$$

4.
$$-\frac{9}{2} + \left(-\frac{1}{2}\right) \div \frac{2}{3} + 2 - (-4) \div (-5)$$

5.
$$(-1)^8 \div \left(-\frac{7}{4}\right) \div \left(1 \div \left(\frac{1}{6} - \frac{7}{4}\right)\right)$$

Order of Operations (E) Answers

1.
$$2^{-\frac{1}{2} - \frac{5}{4}^2 + \left(-\frac{3}{2}\right)^4}$$

= 8

2.
$$2 \times \left(-\frac{7}{3}\right) - \left(-1 + \left(-4\right) - \left(1 - 12\right)\right)$$

= $-\frac{32}{3}$

3.
$$\frac{8}{3} \times \left(\frac{7^2}{2} - \left(-\frac{3}{2}\right)\right) \div \left((-3) \div \frac{4}{5}\right)$$

= $-\frac{88}{9}$

4.
$$-\frac{9}{2} + \left(-\frac{1}{2}\right) \div \frac{2}{3} + 2 - (-4) \div (-5)$$

= $-\frac{81}{20}$

5.
$$(-1)^8 \div \left(-\frac{7}{4}\right) \div \left(1 \div \left(\frac{1}{6} - \frac{7}{4}\right)\right)$$

= $\frac{19}{21}$

Order of Operations (F)

1.
$$-\frac{1}{4} - \left(\left(-\frac{8}{3} \right) \div \left(-1 - \left(-3 + \frac{3}{2} \right) \right) - (-8) \right)$$

2.
$$\left(-\frac{4}{3}\right) \div \left(-1\right)^2 - \left(\left(-\frac{2}{5}\right) \times \left(-\frac{5}{2}\right)\right)^2$$

3.
$$((-8) \div (-2))^{5+(-2)} - (-1)^2$$

4.
$$\left(\frac{7}{4} - 2 \times \frac{3}{4}\right) \times \frac{5}{2} \times \frac{5}{6} \times 8$$

5.
$$\left(\frac{10}{3} \div \left(-\frac{9}{4}\right) \div \left(-\frac{2}{3}\right)\right)^1 \times \left(-1 + \left(-\frac{1}{5}\right)\right)$$

Order of Operations (F) Answers

1.
$$-\frac{1}{4} - \left(\left(-\frac{8}{3}\right) \div \left(-1 - \left(-3 + \frac{3}{2}\right)\right) - (-8)\right)$$

= $-\frac{35}{12}$

2.
$$\left(-\frac{4}{3}\right) \div \left(-1\right)^2 - \left(\left(-\frac{2}{5}\right) \times \left(-\frac{5}{2}\right)\right)^2$$

= $-\frac{7}{3}$

3.
$$((-8) \div (-2))^{5+(-2)} - (-1)^2$$

= 63

4.
$$\left(\frac{7}{4} - 2 \times \frac{3}{4}\right) \times \frac{5}{2} \times \frac{5}{6} \times 8$$

= $\frac{25}{6}$

5.
$$\left(\frac{10}{3} \div \left(-\frac{9}{4}\right) \div \left(-\frac{2}{3}\right)\right)^{1} \times \left(-1 + \left(-\frac{1}{5}\right)\right)$$

= $-\frac{8}{3}$

Order of Operations (G)

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

2.
$$1^2 \times (-3) + (-2) + (-\frac{3}{2}) - (-2)$$

3.
$$\left(-\frac{8}{3}\right) \times \left(-6\right)^{\left(-1\right)^{\frac{5}{3}-\left(-\frac{4}{3}\right)} - \left(-3\right)}$$

4.
$$(10 \div 5)^5 \div (2 \times (-\frac{1}{2}))^3$$

5.
$$(-2) \times \left(-\frac{3}{2} + 6 - (-11) + \left(-\frac{9}{2}\right) + (-3)\right)$$

Order of Operations (G) Answers

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

= $-\frac{16}{3}$

2.
$$1^2 \times (-3) + (-2) + (-\frac{3}{2}) - (-2)$$

= $-\frac{9}{2}$

3.
$$\left(-\frac{8}{3}\right) \times \left(-6\right)^{\left(-1\right)^{\frac{5}{3}-\left(-\frac{4}{3}\right)}-\left(-3\right)}$$

= $-\frac{96}{3}$

4.
$$(10 \div 5)^5 \div (2 \times (-\frac{1}{2}))^3$$

= -32

5.
$$(-2) \times \left(-\frac{3}{2} + 6 - (-11) + \left(-\frac{9}{2}\right) + (-3)\right)$$

= -16

Order of Operations (H)

1.
$$\left(-\frac{1}{2}\right)^2 + \left(\left(-9\right)^2\right)^{-\frac{1}{3} - \left(-\frac{1}{3}\right)}$$

2.
$$3 \times \left(-\frac{2}{5}\right) \div \left(\left(\frac{4}{5} \div (-2)\right)^2 + \left(-\frac{7}{5}\right)\right)$$

3.
$$3 \div (-1)^3 - (-\frac{5}{2} - (-3) \times 9)$$

4.
$$((7-1) \div ((-4) \times 3))^{\frac{2}{5} \times 5}$$

5.
$$(-1)^{\left(\frac{3}{2} - \left(-\frac{6}{5}\right)\right) \times (4+6)} \div \frac{5}{2}$$

Order of Operations (H) Answers

1.
$$\left(-\frac{1}{2}\right)^2 + \left((-9)^2\right)^{-\frac{1}{3} - \left(-\frac{1}{3}\right)}$$

= $\frac{5}{4}$

2.
$$3 \times \left(-\frac{2}{5}\right) \div \left(\left(\frac{4}{5} \div (-2)\right)^2 + \left(-\frac{7}{5}\right)\right)$$

= $\frac{30}{31}$

3.
$$3 \div (-1)^3 - (-\frac{5}{2} - (-3) \times 9)$$

= $-\frac{55}{2}$

4.
$$((7-1) \div ((-4) \times 3))^{\frac{2}{5} \times 5}$$

= $\frac{1}{4}$

5.
$$(-1)^{\left(\frac{3}{2} - \left(-\frac{6}{5}\right)\right) \times (4+6)} \div \frac{5}{2}$$

= $-\frac{2}{5}$

Order of Operations (I)

1.
$$\frac{1}{6} \left(\frac{1}{6} - \left(-\frac{4}{3} \right) \right)^{\left(-\frac{9}{2} \right) \times (-2+2)}$$

2.
$$\frac{2}{3} \times 3 \div \left(\left(-\frac{4}{5} \right) \div (-2) \times (-6) \div \frac{12}{5} \right)$$

3.
$$(-2)^{\left(\left(-\frac{11}{6}\right)^{3-3}+(-3)\right)\times(-3)}$$

4.
$$\frac{5}{3} \times \frac{5}{3} \div \left(\frac{3}{2} + \left(-\frac{1}{6}\right) \div \left(2 - \frac{5}{4}\right)\right)$$

5.
$$-11 + \frac{7}{2} - \left(-\frac{7}{5}\right) + 5 - \left(\frac{11}{4} - 2\right)$$

Order of Operations (I) Answers

1.
$$\frac{1}{6} \left(\frac{1}{6} - \left(-\frac{4}{3} \right) \right)^{\left(-\frac{9}{2} \right) \times (-2+2)}$$

$$= \frac{1}{6}$$

2.
$$\frac{2}{3} \times 3 \div \left(\left(-\frac{4}{5} \right) \div \left(-2 \right) \times \left(-6 \right) \div \frac{12}{5} \right)$$

= -2

3.
$$(-2)^{\left(\left(-\frac{11}{6}\right)^{3-3}+(-3)\right)\times(-3)}$$

= $\frac{64}{64}$

4.
$$\frac{5}{3} \times \frac{5}{3} \div \left(\frac{3}{2} + \left(-\frac{1}{6}\right) \div \left(2 - \frac{5}{4}\right)\right)$$

= $\frac{50}{23}$

5.
$$-11 + \frac{7}{2} - \left(-\frac{7}{5}\right) + 5 - \left(\frac{11}{4} - 2\right)$$

= $-\frac{37}{20}$

Order of Operations (J)

1.
$$(-1-2) \div \frac{3}{2}^2 \div ((-\frac{11}{4}) \div (-2))$$

2.
$$\left(-\frac{9}{5} - \frac{1}{2}\right) \div \left(-4\right)^{1-1} \div \left(-\frac{2}{5}\right)$$

3.
$$\left((-2) \times \left(\frac{3}{2}^1 + \left(-\frac{6}{5} \right) \right) \right)^2 + \left(-\frac{12}{5} \right)$$

4.
$$3 \times 12 + (-2) + 1 + 2 + 2$$

5.
$$\left((-1)^6 \div (-1)^3 \right)^{3^4}$$

Order of Operations (J) Answers

1.
$$(-1-2) \div \frac{3}{2}^2 \div ((-\frac{11}{4}) \div (-2))$$

= $-\frac{32}{33}$

2.
$$\left(-\frac{9}{5} - \frac{1}{2}\right) \div \left(-4\right)^{1-1} \div \left(-\frac{2}{5}\right)$$

= $\frac{23}{4}$

3.
$$\left((-2) \times \left(\frac{3}{2}^1 + \left(-\frac{6}{5} \right) \right) \right)^2 + \left(-\frac{12}{5} \right)$$

= $-\frac{51}{25}$

4.
$$3 \times 12 + (-2) + 1 + 2 + 2$$

= 39

5.
$$\left((-1)^6 \div (-1)^3 \right)^{3^4}$$

= -1