Order of Operations (A)

1.
$$\frac{5}{2} + \frac{7}{2} - \frac{9}{4} \div \left(9 \times 2^{\frac{4}{3} \times \frac{3}{2}}\right)$$

2.
$$\frac{9}{2} + \left(\frac{7}{6} - \frac{1}{2}\right) \div \left(2 + 1 + 5 + \frac{8}{3}\right)$$

3.
$$4^{\frac{1}{2}+5 \div \frac{7}{3} \times 1 \div 3 \times \frac{7}{2}}$$

4.
$$4 \div \left(1^{6 \div 2} + \frac{7}{2} + \frac{1}{2}\right) \div \frac{8}{5}$$

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

Order of Operations (A) Answers

1.
$$\frac{5}{2} + \frac{7}{2} - \frac{9}{4} \div \left(9 \times 2^{\frac{4}{3} \times \frac{3}{2}}\right)$$

= $\frac{95}{16}$

2.
$$\frac{9}{2} + \left(\frac{7}{6} - \frac{1}{2}\right) \div \left(2 + 1 + 5 + \frac{8}{3}\right)$$

= $\frac{73}{16}$

3.
$$4^{\frac{1}{2}+5 \div \frac{7}{3} \times 1 \div 3 \times \frac{7}{2}}$$

= 64

4.
$$4 \div \left(1^{6 \div 2} + \frac{7}{2} + \frac{1}{2}\right) \div \frac{8}{5}$$

= $\frac{1}{2}$

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

= $\frac{10}{21}$

Order of Operations (B)

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

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

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

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

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

Order of Operations (B) Answers

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

= $\frac{1}{4}$

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

= $\frac{22}{3}$

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

= 12

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

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

= $\frac{2}{3}$

Order of Operations (C)

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

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

3.
$$\left(\frac{1}{3} \times 6 + 10 \div 2 - 1\right) \div \left(1 - \frac{1}{4}\right)$$

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

5.
$$4 \div 5 + 1 \times \left(12 - \left(\frac{1}{3} + \frac{5}{3}\right)\right)^1$$

Order of Operations (C) Answers

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

= 64

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

= $\frac{6}{5}$

3.
$$\left(\frac{1}{3} \times 6 + 10 \div 2 - 1\right) \div \left(1 - \frac{1}{4}\right)$$

= 8

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

= 48

5.
$$4 \div 5 + 1 \times \left(12 - \left(\frac{1}{3} + \frac{5}{3}\right)\right)^1$$

= $\frac{54}{5}$

Order of Operations (D)

1.
$$\left(5-2\times\frac{5}{2}\right)\div\left(4\times6\div\left(\frac{11}{2}-1\right)\right)$$

2.
$$(3-2 \div (8-(2+2)))^{4-2}$$

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

4.
$$(3^2 + 1^7) \times 3 \times \frac{11}{6} \div 7$$

5.
$$1 \times \frac{10}{3} \times 6 \div \left(\frac{11}{3} + \frac{9}{2} - \frac{5}{3}\right) \div 10$$

Order of Operations (D) Answers

1.
$$\left(5-2\times\frac{5}{2}\right) \div \left(4\times6\div\left(\frac{11}{2}-1\right)\right)$$

= $\frac{1}{2}$

2.
$$(3-2 \div (8-(2+2)))^{4-2}$$

= $\frac{25}{4}$

3.
$$8 \times \frac{5}{4} \times \frac{5}{4} \times (2-2) \div \left(\frac{2}{3} \times \frac{7}{2}\right)$$
$$= 0$$

4.
$$(3^2 + 1^7) \times 3 \times \frac{11}{6} \div 7$$

= $\frac{55}{7}$

5.
$$1 \times \frac{10}{3} \times 6 \div \left(\frac{11}{3} + \frac{9}{2} - \frac{5}{3}\right) \div 10$$

= $\frac{4}{13}$

Order of Operations (E)

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

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

3.
$$7 + \frac{12}{5} + \frac{2}{5} + \frac{11}{3} \div \frac{1}{3} - 6 \div \frac{5}{4}$$

4.
$$(6 \div (5 - (12 - 10)))^{(\frac{3}{2} - 1) \times 6}$$

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

Order of Operations (E) Answers

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

= $\frac{1}{27}$

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

= $\frac{1}{3}$

3.
$$7 + \frac{12}{5} + \frac{2}{5} + \frac{11}{3} \div \frac{1}{3} - 6 \div \frac{5}{4}$$

= 16

4.
$$(6 \div (5 - (12 - 10)))^{(\frac{3}{2} - 1) \times 6}$$

= 8

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

= 6

Order of Operations (F)

1.
$$1^4 \div \left(\frac{1}{3} \div 2 + \frac{7}{6} \times 1\right)^1$$

2.
$$(7+3) \times (2-(\frac{3}{2}-\frac{3}{5})) - \frac{3}{2} \times 5$$

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

4.
$$1+10-5-(8\times 1-2)\div \frac{7}{4}$$

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

Order of Operations (F) Answers

1.
$$1^4 \div \left(\frac{1}{3} \div 2 + \frac{7}{6} \times 1\right)^1 = \frac{3}{4}$$

2.
$$(7+3) \times (2 - (\frac{3}{2} - \frac{3}{5})) - \frac{3}{2} \times 5$$

= $\frac{7}{2}$

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

= $\frac{1}{3}$

4.
$$1+10-5-(8\times 1-2)\div \frac{7}{4}$$

= $\frac{18}{7}$

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

= $\frac{22}{15}$

Order of Operations (G)

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

2.
$$\frac{3}{2}^{2+1-1} \div \left(7+2-\frac{11}{4}\right)$$

3.
$$\frac{3}{5} + \left(\frac{11}{2} + 1 - 1\right)^1 - \left(\frac{11}{3} - \frac{1}{2}\right)$$

4.
$$2 \times \left(\frac{10}{3} \div \left(\frac{5}{6} \times 1 \times \left(\frac{1}{2} + \frac{1}{2}\right)\right) - \frac{5}{3}\right)$$

5.
$$8 - \frac{3}{2} - \frac{1}{4} - \left(7 - 1 \times \frac{11}{3} - \frac{1}{4}\right)$$

Order of Operations (G) Answers

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

= $\frac{16}{15}$

2.
$$\frac{3^{2+1-1}}{2}$$
 ÷ $\left(7+2-\frac{11}{4}\right)$
= $\frac{9}{25}$

3.
$$\frac{3}{5} + \left(\frac{11}{2} + 1 - 1\right)^{1} - \left(\frac{11}{3} - \frac{1}{2}\right)$$

= $\frac{44}{15}$

4.
$$2 \times \left(\frac{10}{3} \div \left(\frac{5}{6} \times 1 \times \left(\frac{1}{2} + \frac{1}{2}\right)\right) - \frac{5}{3}\right)$$

= $\frac{14}{3}$

5.
$$8 - \frac{3}{2} - \frac{1}{4} - \left(7 - 1 \times \frac{11}{3} - \frac{1}{4}\right)$$

= $\frac{19}{6}$

Order of Operations (H)

1.
$$8 \times 4 \div (2 \times 8) \div \left(\frac{4}{5} \times 1\right)^2$$

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

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

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

5.
$$1 \times 2 \times 6 - \left(2 - \frac{11}{6} + \frac{3}{2} - \frac{1}{2}\right)$$

Order of Operations (H) Answers

1.
$$8 \times 4 \div (2 \times 8) \div \left(\frac{4}{5} \times 1\right)^2$$

$$= \frac{25}{8}$$

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

= $\frac{19}{5}$

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

= $\frac{39}{7}$

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

= $\frac{4}{9}$

5.
$$1 \times 2 \times 6 - \left(2 - \frac{11}{6} + \frac{3}{2} - \frac{1}{2}\right)$$

= $\frac{65}{6}$

Order of Operations (I)

1.
$$1 \times \left(2 + 5 - \frac{8}{3}\right) \times \frac{1}{3}^{\frac{11}{6} - \frac{5}{6}}$$

2.
$$\frac{9}{2} \div \frac{5}{2}^{4-\left(1+\left(\frac{2}{3}-\frac{1}{2}\right)\div\frac{1}{6}\right)}$$

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

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

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

Order of Operations (I) Answers

1.
$$1 \times (2+5-\frac{8}{3}) \times \frac{1}{3}^{\frac{11}{6}-\frac{5}{6}}$$

= $\frac{13}{9}$

2.
$$\frac{9}{2} \div \frac{5}{2}^{4-\left(1+\left(\frac{2}{3}-\frac{1}{2}\right)\div\frac{1}{6}\right)}$$

= $\frac{18}{25}$

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

= $\frac{33}{16}$

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

= $\frac{92}{15}$

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

Order of Operations (J)

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

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

3.
$$3 \div \left(1 + \frac{1}{3} + 9 - \left(\frac{9}{4} + \frac{1}{4}\right) - \frac{7}{6}\right)$$

4.
$$\left(1+1\times\frac{11}{5}\right)\times\frac{5}{3}^{1}\div\frac{8}{5}+\frac{7}{4}$$

5.
$$(2 \times 2 - 1 \times (9 - 2^3))^2$$

Order of Operations (J) Answers

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

= $\frac{1}{3}$

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

= $\frac{29}{8}$

3.
$$3 \div \left(1 + \frac{1}{3} + 9 - \left(\frac{9}{4} + \frac{1}{4}\right) - \frac{7}{6}\right)$$

= $\frac{9}{20}$

4.
$$\left(1+1 \times \frac{11}{5}\right) \times \frac{5}{3}^{1} \div \frac{8}{5} + \frac{7}{4}$$

= $\frac{61}{12}$

5.
$$(2 \times 2 - 1 \times (9 - 2^3))^2$$

= $\frac{9}{}$