

Questions

1. Evaluate $(2 - 5)^2 \div 3 \times 4$.
2. Evaluate $2(3 - 5 + 6) + 5$.
3. Evaluate $3(5 - 7)^2 - 6(3)$.
4. Evaluate $5 \cdot 6 - (3 - 5)^2 + 8 \cdot 2$.
5. Evaluate $\frac{3}{4} \left(-\frac{2}{5} \right) - \left(-\frac{3}{5} \right)$.

Solutions

1.

$$\begin{aligned}(2 - 5)^2 \div 3 \times 4 &= (-3)^2 \div 3 \times 4 \text{ brackets} \\ &= 9 \div 3 \times 4 \text{ powers} \\ &= 3 \times 4 \text{ multiplication/division from left to right} \\ &= 12 \text{ multiplication/division from left to right}\end{aligned}$$

2.

$$\begin{aligned}2(3 - 5 + 6) + 5 &= 2(4) + 5 \text{ brackets} \\ &= 8 + 5 \text{ multiplication} \\ &= 13 \text{ addition}\end{aligned}$$

3.

$$\begin{aligned}3(5 - 7)^2 - 6(3) &= 3(-2)^2 - 6(3) \text{ brackets} \\ &= 3(4) - 6(3) \text{ powers} \\ &= 12 - 18 \text{ multiplication} \\ &= -6 \text{ subtraction}\end{aligned}$$

4.

$$\begin{aligned}5 \cdot 6 - (3 - 5)^2 + 8 \cdot 2 &= 5 \cdot 6 - (-2)^2 + 8 \cdot 2 \text{ brackets} \\ &= 5 \cdot 6 - 4 + 8 \cdot 2 \text{ powers} \\ &= 30 - 4 + 16 \text{ multiplication} \\ &= 42 \text{ addition/subtraction}\end{aligned}$$

5.

$$\begin{aligned}\frac{3}{4} \left(-\frac{2}{5} \right) - \left(-\frac{3}{5} \right) &= -\frac{3 \times 2}{4 \times 5} + \frac{3}{5} \\ &= -\frac{6}{20} + \frac{3}{5} \\ &= -\frac{6}{20} + \frac{3 \times 4}{5 \times 4} \\ &= \frac{-6}{20} + \frac{12}{20} \\ &= \frac{-6 + 12}{20} \\ &= \frac{6}{20} = \frac{\cancel{2} \times 3}{\cancel{2} \times 10} = \frac{3}{10}\end{aligned}$$