

**B. ÔN TẬP VỀ CÁC PHÉP TÍNH VỚI SỐ TỰ NHIÊN,
PHÂN SỐ, SỐ THẬP PHÂN.**

I. Các phép tính với phân số, hỗn số.

Bài 1: Tính:

a) $\frac{6}{7} + \frac{7}{8}$

b) $\frac{4}{5} - \frac{2}{3}$

c) $\frac{2}{3} \times \frac{4}{9}$

d) $\frac{1}{5} : \frac{2}{7}$

Bài 2: Tính:

a) $\frac{2}{3} + \frac{3}{51}$

b) $\frac{4}{7} - \frac{11}{42}$

c) $2\frac{1}{3} \times 3\frac{1}{2}$

d) $4\frac{1}{3} : 2\frac{1}{3}$

HDẫn:

c) $2\frac{1}{3} \times 3\frac{1}{2} = \frac{7}{3} \cdot \frac{7}{2} = \frac{49}{6}$

d) $4\frac{1}{3} : 2\frac{1}{3} = \frac{13}{3} : \frac{7}{3} = \frac{13}{7}$

Bài 3: Tính:

a) $\frac{3}{5} \times \frac{2}{7} : \frac{4}{9}$

b) $\frac{2}{11} : \frac{1}{3} \times \frac{3}{2}$

c) $\frac{5}{2} \times \frac{1}{3} + \frac{1}{4}$

d) $\frac{1}{2} + \frac{1}{4} : \frac{1}{6}$

HDẫn:

a) $\frac{3}{5} \times \frac{2}{7} : \frac{4}{9} = \frac{3 \cdot 2 \cdot 9}{5 \cdot 7 \cdot 4} = \frac{27}{70}$

b) $\frac{2}{11} : \frac{1}{3} \times \frac{3}{2} = \frac{2 \cdot 3 \cdot 3}{11 \cdot 1 \cdot 2} = \frac{9}{11}$

c) $\frac{5}{2} \times \frac{1}{3} + \frac{1}{4} = \frac{5}{6} + \frac{1}{4} = \frac{13}{12}$

d) $\frac{1}{2} + \frac{1}{4} : \frac{1}{6} = \frac{1}{2} + \frac{3}{2} = 2$

Bài 4: Tính:

a) $\frac{13}{15} + \frac{4}{7} - \frac{101}{105}$

b) $\frac{2}{5} + \frac{3}{5} \times \frac{4}{9}$

c) $\frac{3}{4} \times \frac{5}{2} \times \frac{7}{6}$

d) $\frac{1}{2} : \frac{1}{4} - \frac{1}{6}$

e) $\frac{2}{3} - \frac{1}{4} + \frac{2}{9}$

g) $\frac{5}{2} + \frac{1}{3} \times \frac{3}{2}$

Bài 5: Tính:

a) $4\frac{3}{8} + 5\frac{2}{3}$

b) $2\frac{3}{8} + 1\frac{1}{4} + 3\frac{6}{7}$

c) $2\frac{3}{8} - 1\frac{1}{4} + 5\frac{1}{3}$

Bài 6: Tính:

a) $\left(\frac{5}{2} + \frac{1}{3}\right) : \left(1 - \frac{2}{3}\right)$

b) $\left(\frac{5}{2} - \frac{1}{3}\right) \times \frac{9}{2} - \frac{6}{7}$

Bài 7: Tính:

a) $\frac{6}{7} : \left(\frac{1}{2} \times \frac{3}{4}\right) - \frac{5}{8}$

b) $34 - 2 : \left(\frac{3}{5} - \frac{1}{2}\right)$

Bài 8: Tính:

a) $12\frac{1}{3} - \left(3\frac{3}{4} + 4\frac{3}{4}\right)$

b) $3\frac{5}{6} + 2\frac{1}{6} \times 6$

c) $3\frac{1}{2} + 4\frac{5}{7} - 5\frac{5}{14}$

d) $4\frac{1}{2} + \frac{1}{2} : 5\frac{1}{2}$

Bài 9: Tính nhanh:

a) $\frac{254 \times 399 - 145}{254 + 399 \times 253}$

b) $\frac{5932 + 6001 \times 5931}{5932 \times 6001 - 69}$

HDẫn:

$$a) \frac{254.399-145}{254+399.253} = \frac{(253+1).399-145}{254+399.253} = \frac{253.399+399-145}{254+399.253} = \frac{253.399+254}{254+399.253} = 1$$

$$b) \frac{5932+6001 \times 5931}{5932 \times 6001 - 69} = \frac{5932+6001.5931}{(5931+1).6001-69} = \frac{5932+5931.6001}{5931.6001+6001-69} = \frac{5932+5931.6001}{5931.6001+5932} = 1$$

II. Tìm x:

Bài 10: Tìm x:

$$a) x + 2\frac{3}{4} = 5\frac{2}{3}$$

$$b) x - 1\frac{4}{5} = 3\frac{2}{7}$$

$$c) x \times 3\frac{1}{2} = 4\frac{3}{4}$$

$$d) x : 2\frac{2}{3} = 4\frac{1}{3}$$

Bài 11: Tìm x:

$$a) x - \frac{3}{4} = 6 \times \frac{3}{8}$$

$$b) \frac{7}{8} : x = 3 - \frac{1}{2}$$

$$c) x + \frac{1}{2} \times \frac{1}{3} = \frac{3}{4}$$

HDẫn:

$$a) x - \frac{3}{4} = 6 \times \frac{3}{8} \Rightarrow x - \frac{3}{4} = \frac{9}{4} \Rightarrow x = \frac{9}{4} + \frac{3}{4} = 3$$

$$b) \frac{7}{8} : x = 3 - \frac{1}{2} \Rightarrow \frac{7}{8} : x = \frac{5}{2} \Rightarrow x = \frac{7}{8} : \frac{5}{2} = \frac{7}{20}$$

$$c) x + \frac{1}{2} \times \frac{1}{3} = \frac{3}{4} \Rightarrow x + \frac{1}{6} = \frac{3}{4} \Rightarrow x = \frac{3}{4} - \frac{1}{6} = \frac{7}{12}$$

Bài 12: Tìm x:

$$a) \frac{3}{2} \times \frac{4}{5} - x = \frac{2}{3}$$

$$b) x \times 3\frac{1}{3} = 3\frac{1}{3} : 4\frac{1}{4}$$

$$c) 5\frac{2}{3} : x = 3\frac{2}{3} - 2\frac{1}{2}$$

HDẫn:

$$a) \frac{3}{2} \times \frac{4}{5} - x = \frac{2}{3} \Rightarrow \frac{12}{10} - x = \frac{2}{3} \Rightarrow x = \frac{6}{5} - \frac{2}{3} = \frac{8}{15}$$

$$b) x \times 3\frac{1}{3} = 3\frac{1}{3} : 4\frac{1}{4} \Rightarrow x \cdot \frac{10}{3} = \frac{10}{3} : \frac{17}{4} \Rightarrow x \cdot \frac{10}{3} = \frac{40}{51} \Rightarrow x = \frac{40}{51} : \frac{10}{3} = \frac{4}{17}$$

$$c) 5\frac{2}{3} : x = 3\frac{2}{3} - 2\frac{1}{2} \Rightarrow \frac{17}{3} : x = \frac{11}{3} - \frac{5}{2} \Rightarrow \frac{17}{3} : x = \frac{7}{6} \Rightarrow x = \frac{17}{3} : \frac{7}{6} = \frac{34}{7}$$

III. Tính giá trị biểu thức:

Bài 13: Tính giá trị biểu thức sau:

$$A = \left(6 : \frac{3}{5} - 1\frac{1}{6} \times \frac{6}{7} \right) : \left(4\frac{1}{5} \times \frac{10}{11} + 5\frac{2}{11} \right)$$

HDẫn:

$$A = \left(6 : \frac{3}{5} - 1\frac{1}{6} \times \frac{6}{7} \right) : \left(4\frac{1}{5} \times \frac{10}{11} + 5\frac{2}{11} \right) = \left(6 \cdot \frac{5}{3} - \frac{7}{6} \cdot \frac{6}{7} \right) : \left(\frac{21}{5} \cdot \frac{10}{11} + \frac{57}{11} \right) = (10 - 1) : \left(\frac{42}{11} + \frac{57}{11} \right)$$

$$= 9 : \frac{99}{11} = 9 : 9 = 1$$

Bài 14: Tính giá trị biểu thức:

$$B = \left(1 - \frac{1}{2}\right) \cdot \left(1 - \frac{1}{3}\right) \cdot \left(1 - \frac{1}{4}\right) \cdot \left(1 - \frac{1}{5}\right) \cdots \left(1 - \frac{1}{2003}\right) \cdot \left(1 - \frac{1}{2004}\right)$$

HDẫn:

$$\begin{aligned} B &= \left(1 - \frac{1}{2}\right) \cdot \left(1 - \frac{1}{3}\right) \cdot \left(1 - \frac{1}{4}\right) \cdot \left(1 - \frac{1}{5}\right) \cdots \left(1 - \frac{1}{2003}\right) \cdot \left(1 - \frac{1}{2004}\right) \\ &= \frac{1}{2} \cdot \frac{2}{3} \cdot \frac{3}{4} \cdot \frac{4}{5} \cdots \frac{2002}{2003} \cdot \frac{2003}{2004} = \frac{1}{\cancel{2}} \cdot \frac{\cancel{2}}{\cancel{3}} \cdot \frac{\cancel{3}}{\cancel{4}} \cdot \frac{\cancel{4}}{\cancel{5}} \cdots \frac{200\cancel{2}}{200\cancel{3}} \cdot \frac{200\cancel{3}}{2004} = \frac{1}{2004} \end{aligned}$$

Bài 15: Tính giá trị biểu thức:

$$C = 5\frac{9}{10} : \frac{3}{2} - \left(2\frac{1}{3} \times 4\frac{1}{2} - 2 \times 2\frac{1}{3}\right) : \frac{7}{4}$$

HDẫn:

$$\begin{aligned} C &= 5\frac{9}{10} : \frac{3}{2} - \left(2\frac{1}{3} \times 4\frac{1}{2} - 2 \times 2\frac{1}{3}\right) : \frac{7}{4} = \frac{59}{10} : \frac{3}{2} - \left(\frac{7}{3} \cdot \frac{9}{2} - 2 \cdot \frac{7}{3}\right) : \frac{7}{4} \\ &= \frac{59}{10} \cdot \frac{2}{3} - \frac{7}{3} \cdot \left(\frac{9}{2} - 2\right) : \frac{7}{4} = \frac{59}{15} - \frac{7}{3} \cdot \frac{5}{2} \cdot \frac{4}{7} = \frac{59}{15} - \frac{10}{3} = \frac{3}{5} \end{aligned}$$

BTVN:

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c) $\frac{2}{3} \times \frac{4}{9}$

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Bài 2: Tính:

a) $\frac{13}{15} + \frac{4}{7} - \frac{101}{105}$

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Bài 3: Tìm x:

a) $x + 2\frac{3}{4} = 5\frac{2}{3}$

b) $x - 1\frac{4}{5} = 3\frac{2}{7}$

c) $x \times 3\frac{1}{2} = 4\frac{3}{4}$

d) $x : 2\frac{2}{3} = 4\frac{1}{3}$