

BỒI DƯỠNG NĂNG LỰC TOÁN 6
HƯỚNG DẪN BÀI TẬP VỀ NHÀ
Tài liệu lớp học 6AV - 23/26 Nguyễn Hồng

Họ và tên: Ngày học:

Ca 1:

Câu 1. Tính bằng cách thuận tiện nhất:

a) $2634 + 873 + 8374 - 4873 - 3634 + 626$

c) $5 \times 14 \times 25 \times 32 \times 125 \times 4$

e) $N = 10 \times 12 \times 14 \times 16 \times (88 \times 17 - 44 \times 34)$

g) $7364 - (8475 - 4555) - 364 + 445 + 475$

i) $(80 \times 96 + 40 \times 1808) : 1000$

b) $7794 - (873 - 734) + (1873 - 794 - 734)$

d) $(1763 + 7634 + 23 \times 764) \times (346 \times 45 - 173 \times 90)$

f) $324 \times 36 - 254 \times 72 + 18 \times 368$

h) $21 \times 32 \times 43 - 21 \times 32 \times 40 - 21 \times 32 \times 3$

k) $123 + 234 + 345 + 456 + 567 + 678 + 789 + 891 + 912$

HD:

a) $2634 + 873 + 8374 - 4873 - 3634 + 626$
 $= (8374 + 626) - (3634 - 2634) - (4873 - 873)$
 $= 9000 - 1000 - 4000$
 $= 4000$

c) $5 \times 14 \times 25 \times 32 \times 125 \times 4$
 $= 5 \times (7 \times 2) \times 25 \times (8 \times 4) \times 125 \times 4$
 $= (25 \times 4) \times (125 \times 8) \times (5 \times 2) \times 7 \times 4$
 $= 100 \times 1000 \times 10 \times 28$
 $= 28000000$

e) $N = 10 \times 12 \times 14 \times 16 \times (88 \times 17 - 44 \times 34)$
 $= 10 \times 12 \times 14 \times 16 \times (88 \times 17 - 44 \times 2 \times 17)$
 $= 10 \times 12 \times 14 \times 16 \times 88 \times (17 - 17)$
 $= 10 \times 12 \times 14 \times 16 \times 88 \times 0$
 $= 0$

g) $7364 - (8475 - 4555) - 364 + 445 + 475$
 $= 7364 - 8475 + 4555 - 364 + 445 + 475$
 $= (7364 - 364) - (8475 - 475) + (4555 + 445)$
 $= 7000 - 8000 + 5000$
 $= 7000 + 5000 - 8000 = 4000$

b) $7794 - (873 - 734) + (1873 - 794 - 734)$
 $= 7794 - 873 + 734 + 1873 - 794 - 734$
 $= (7794 - 794) + (734 - 734) + (1873 - 873)$
 $= 7000 + 0 + 1000$
 $= 8000$

d) $(1763 + 7634 + 23 \times 764) \times (346 \times 45 - 173 \times 90)$
 $= (1763 + 7634 + 23 \times 764) \times (346 \times 45 - 173 \times 2 \times 45)$
 $= (1763 + 7634 + 23 \times 764) \times (346 \times 45 - 346 \times 45)$
 $= (1763 + 7634 + 23 \times 764) \times 0$
 $= 0$

f) $324 \times 36 - 254 \times 72 + 18 \times 368$
 $= 324 \times 36 - 254 \times 2 \times 36 + 18 \times 2 \times 184$
 $= 36 \times (324 - 508 + 184)$
 $= 36 \times 0$
 $= 0$

h) $21 \times 32 \times 43 - 21 \times 32 \times 40 - 21 \times 32 \times 3$
 $= 21 \times 32 \times (43 - 40 - 3)$
 $= 0$

i) $M = (80 \times 96 + 40 \times 1808) : 1000$

$= (80 \times 96 + 40 \times 2 \times 904) : 1000$

$= 80 \times (96 + 904) : 1000$

$= 80$

k) $123 + 234 + 345 + 456 + 567 + 678 + 789 + 891 + 912$

$= (1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9) \times 100 + (1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9) \times 10 + (1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9)$

$= (1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9) \times (100 + 10 + 1)$

$= 45 \times 111 = 4995$

Câu 2. Tìm giá trị của a

a) $24 : a + 24 = 30$

b) $1974 : 14 + a \times 141 = 423$

c) $120 - (45 - a \times 4) = 115$

d) $(a \times 4 - 44) : 4 = 44$

HD:

a) $24 : a + 24 = 30$

$24 : a = 30 - 24$

$24 : a = 6$

$a = 24 : 6$

$a = 4$

b) $1974 : 14 + a \times 141 = 423$

$141 + a \times 141 = 423$

$a \times 141 = 423 - 141$

$a \times 141 = 282$

$a = 282 : 141$

$a = 2$

c) $120 - (45 - a \times 4) = 115$

$45 - a \times 4 = 120 - 115$

$45 - a \times 4 = 5$

$a \times 4 = 45 - 5$

$a \times 4 = 40$

$a = 40 : 4$

$a = 10$

d) $(a \times 4 - 44) : 4 = 44$

$a \times 4 - 44 = 44 \times 4$

$a \times 4 - 44 = 176$

$a \times 4 = 176 + 44$

$a \times 4 = 220$

$a = 220 : 4$

$a = 55$

Câu 3. Điền các số thích hợp vào ô trống sao cho tổng 3 ô liên tiếp đều bằng 2022.

					783				998
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HD:

998	241	783	998	241	783	998	241	783	998
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Câu 4. Tìm các chữ số a, b, c, d:

a) $\overline{ab} + 505 = \overline{ab1}$

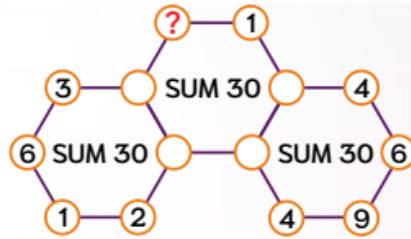
b) $\overline{ab6} - \overline{ab} = 141$

HD:

a) $\overline{ab} + 505 = \overline{ab1} \Rightarrow \overline{ab} + 505 = 10 \times \overline{ab} + 1 \Rightarrow 504 = 9 \times \overline{ab} \Rightarrow \overline{ab} = 56$

b) $\overline{ab} - \overline{ab} = 141 \Rightarrow 10 \times \overline{ab} + 6 - \overline{ab} = 141 \Rightarrow 9 \times \overline{ab} = 135 \Rightarrow \overline{ab} = 15$

Câu 5. Sơ đồ bên là 3 hình lục giác được đánh số ở các đỉnh, trong đó có vài số bị ẩn. Biết rằng tổng của 6 số xung quanh mỗi hình lục giác là 30. Tìm số trên đỉnh có dấu "?".



HD:

Số 4

Ca 2:

Bài 1. Thực hiện phép tính:

a. $L = 11\frac{23}{31} + 5\frac{4}{37} - \left(8\frac{23}{31} - 4\frac{33}{37}\right)$

b. $M = 1\frac{6}{17} \times 4\frac{3}{9} \times \frac{35}{46} : \frac{49}{14} \times 3\frac{12}{13} : 10$

HD:

a. $L = 11\frac{23}{31} + 5\frac{4}{37} - \left(8\frac{23}{31} - 4\frac{33}{37}\right)$

b. $M = 1\frac{6}{17} \times 4\frac{3}{9} \times \frac{35}{46} : \frac{49}{14} \times 3\frac{12}{13} : 10$

$L = 11\frac{23}{31} + 5\frac{4}{37} - 8\frac{23}{31} + 4\frac{33}{37}$

$M = 1\frac{6}{17} \times 4\frac{3}{9} \times \frac{35}{46} : \frac{49}{14} \times 3\frac{12}{13} : 10$

$L = \left(11\frac{23}{31} - 8\frac{23}{31}\right) + \left(5\frac{4}{37} + 4\frac{33}{37}\right)$

$M = \frac{23}{17} \times \frac{39}{9} \times \frac{35}{46} \times \frac{14}{49} \times \frac{51}{13} \times \frac{1}{10}$

$L = 3 + 10 = 13$

$M = \frac{1}{2}$

Bài 2. Tính:

a) $O = 2\frac{3}{13} \times \frac{13}{58} \times 8 \times 2\frac{15}{24} \times \frac{8}{21}$

b) $Q = \left(10 - 1\frac{1}{6} \times \frac{6}{7}\right) : \left(21 : \frac{11}{2} + 5\frac{2}{11}\right)$

HD:

a) $O = 2\frac{3}{13} \times \frac{13}{58} \times 8 \times 2\frac{15}{24} \times \frac{8}{21}$

b) $Q = \left(10 - 1\frac{1}{6} \times \frac{6}{7}\right) : \left(21 : \frac{11}{2} + 5\frac{2}{11}\right)$

$= \frac{29}{13} \times \frac{13}{58} \times 8 \times \frac{63}{24} \times \frac{8}{21}$

$= \left(10 - \frac{7}{6} \times \frac{6}{7}\right) : \left(\frac{42}{11} + \frac{57}{11}\right)$

$= 4$

$= 9 : 9 = 1$

Bài 3. Tìm x:

a) $\left[25 - \left(x + \frac{37}{20}\right)\right] : 3 = 7$

b) $x \times 3\frac{2}{3} - 1\frac{2}{3} = 2\frac{1}{3}$

HD:

$$a) \left[25 - \left(x + \frac{37}{20} \right) \right] : 3 = 7$$

$$b) x \times 3\frac{2}{3} - 1\frac{2}{3} = 2\frac{1}{3}$$

$$\left[25 - \left(x + \frac{37}{20} \right) \right] = 21$$

$$x \times \frac{11}{3} = 2\frac{1}{3} + 1\frac{2}{3}$$

$$\left(x + \frac{37}{20} \right) = 25 - 21 = 4$$

$$x = 4 : \frac{11}{3} = \frac{12}{11}$$

$$x = 4 - \frac{37}{20} = \frac{43}{20}$$

Bài 4. Tìm x, biết:

$$a) 1 - \left(3\frac{3}{8} + x - 2\frac{5}{24} \right) \times \frac{12}{17} = 0$$

$$b) \frac{2}{5} \times \frac{1}{x} + \frac{1}{x} \times 2 + \frac{2}{5} = \frac{1}{2}$$

HD:

$$a) 1 - \left(3\frac{3}{8} + x - 2\frac{5}{24} \right) \times \frac{12}{17} = 0$$

$$b) \frac{2}{5} \times \frac{1}{x} + \frac{1}{x} \times 2 + \frac{2}{5} = \frac{1}{2}$$

$$\left(3\frac{3}{8} + x - 2\frac{5}{24} \right) \times \frac{12}{17} = 1$$

$$\left(\frac{2}{5} + 2 \right) \times \frac{1}{x} + \frac{2}{5} = \frac{1}{2}$$

$$3\frac{3}{8} + x - 2\frac{5}{24} = \frac{17}{12} = 1\frac{10}{24}$$

$$\left(\frac{2}{5} + 2 \right) \times \frac{1}{x} = \frac{1}{2} - \frac{2}{5} = \frac{1}{10}$$

$$3\frac{3}{8} + x = 3\frac{15}{24} = 3\frac{5}{8}$$

$$\frac{1}{x} = \frac{1}{10} : \frac{12}{5} = \frac{5}{120} = \frac{1}{24}$$

$$x = \frac{2}{8} = \frac{1}{4}$$

$$x = 24$$

Bài 5. Thực hiện phép tính: $N = 1 - \frac{11}{6} + \frac{19}{12} - \frac{29}{20} + \frac{41}{30} - \frac{55}{42} + \frac{71}{56} - \frac{89}{72} + \frac{109}{90}$

HD:

$$N = 1 - \frac{11}{6} + \frac{19}{12} - \frac{29}{20} + \frac{41}{30} - \frac{55}{42} + \frac{71}{56} - \frac{89}{72} + \frac{109}{90}$$

$$= 1 - 1\frac{5}{6} + 1\frac{7}{12} - 1\frac{9}{20} + 1\frac{11}{30} - 1\frac{13}{42} + 1\frac{15}{56} - 1\frac{17}{72} + 1\frac{19}{90}$$

$$= 1 - \frac{2+3}{2 \times 3} + \frac{3+4}{3 \times 4} - \frac{4+5}{4 \times 5} + \frac{5+6}{5 \times 6} - \frac{6+7}{6 \times 7} + \frac{7+8}{7 \times 8} - \frac{8+9}{8 \times 9} + \frac{9+10}{9 \times 10}$$

$$= 1 - \left(\frac{1}{2} + \frac{1}{3} \right) + \left(\frac{1}{3} + \frac{1}{4} \right) - \left(\frac{1}{4} + \frac{1}{5} \right) + \left(\frac{1}{5} + \frac{1}{6} \right) - \left(\frac{1}{6} + \frac{1}{7} \right) + \left(\frac{1}{7} + \frac{1}{8} \right) - \left(\frac{1}{8} + \frac{1}{9} \right) + \left(\frac{1}{9} + \frac{1}{10} \right)$$

$$= 1 - \frac{1}{2} + \frac{1}{10} = \frac{3}{5}$$