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Hersiening Inoefening Vaslegging

Graad 7 – Kwartaal 1 – Werkopdrag 2 – 2024

MEMORANDUM

Afdeling A – Finansiële Wiskunde

1.1 Oop getalsin: x = R15 699 – R14 799

15 699
– 14 799
900

Kontantafslag is R900 (3)

1.2.1 Oop getalsin $x = \frac{Bedrag \times Rentekoers \times Tydperk}{100}$

$= \frac{7000 \times 10 \times 1}{100}$

$= \frac{70000}{100}$

$= 700$ Enkelvoudige rente is R700 (3)

1.2.2 Oop getalsin: R7 000 + R700 = x

Totale bedrag wat terugbetaal moet word is R7 700 (3)

2.1 Oop getalsin: a = R500 – R435

= R65 Wins is R65 (2)

2.2 Oop getalsin: b = R15 999 – R12 700

15 999
– 12 700
3 299 Verlies is R3 299 (2)

3.1

Spoed $[km/h]$	x Tyd $[h]$	= Afstand $[km]$
25	2	**50 km**
90	4	**360 km**
120	6	**720 km**
Spoed $[km/h]$	**x Tyd $[h]$**	**= Afstand $[km]$**
40	**3 h**	120
80	**5 h**	400
110	**6 h**	660
Spoed $[km/h]$	**x Tyd $[h]$**	**= Afstand $[km]$**
80 km/h	5	400
50 km/h	12	600
90 km/h	9	810

(9)

2.

3.2 Formule: $Spoed = \frac{Afstand}{Tyd}$

$Spoed = \frac{546}{6}$

Spoed = 91km/h (3)

3.3 Formule: $Tyd = \frac{Afstand}{Spoed}$

$Tyd = \frac{810}{90}$

Tyd = 9 uur (3)

3.4 $Afstand = Spoed\ x\ Tyd$ 3 m/s x 60 s = 180 m/min

= 180 x 20

= 3 600 m

Afstand = 3 600 m of 3,6 km (3)

Afdeling B – Gewone Breuke

1.1 $\frac{4}{5} = \frac{8}{10} = \frac{80}{100}$ 2.2 $\frac{5}{9} = \frac{15}{27} = \frac{30}{54}$

1.3 $\frac{3}{4} = \frac{9}{12} = \frac{36}{48}$ 1.4 $\frac{7}{3} = \frac{14}{6} = \frac{70}{30}$

1.5 $\frac{10}{100} = \frac{1}{10} = \frac{100}{1000}$ 1.6 $\frac{8}{7} = \frac{24}{21} = \frac{72}{63}$ (12)

2.1.1 $\frac{3}{6} = \frac{1}{2}$ 2.1.2 $\frac{3}{4} > \frac{1}{2}$ 2.1.3 $\frac{4}{10} = \frac{2}{5}$ 2.1.4 $\frac{3}{5} < \frac{8}{10}$

2.1.5 $\frac{1}{10} > \frac{1}{100}$ 2.1.6 $\frac{7}{3} > 3$ 2.1.7 $\frac{23}{50} = \frac{46}{100}$ 2.1.8 $\frac{3}{2} < \frac{5}{3}$ (8)

2.2 KGV is 24 $\frac{3}{4}; \frac{3}{6}; \frac{5}{8}; \frac{2}{3} \rightarrow \frac{18}{24}; \frac{12}{24}; \frac{15}{24}; \frac{16}{24}$

Dalende volgorde is $\frac{3}{4}; \frac{2}{3}; \frac{5}{8}; \frac{3}{6}$ (2)

3.1 $\frac{4}{3} = \mathbf{1\frac{1}{3}}$ 3.2 $\frac{9}{5} = \mathbf{1\frac{4}{5}}$ 3.3 $\frac{14}{8} = \mathbf{1\frac{3}{4}}$ 3.4 $\frac{19}{12} = \mathbf{1\frac{7}{12}}$ 3.5 $\frac{31}{15} = \mathbf{2\frac{1}{15}}$ (5)

4.1 $1\frac{3}{4} = \mathbf{\frac{7}{4}}$ 4.2 $1\frac{4}{5} = \mathbf{\frac{9}{5}}$ 4.3 $2\frac{7}{8} = \mathbf{\frac{23}{8}}$ 4.4 $3\frac{8}{12} = \mathbf{\frac{44}{12}}$ (4)

5.1 $\frac{4}{16} = \frac{1}{4}$ 5.2 $\frac{5}{20} = \frac{1}{4}$ 5.3 $\frac{7}{35} = \frac{1}{5}$ 5.4 $\frac{8}{64} = \frac{1}{8}$ (4)

6.1 $3\frac{1}{2} + 4\frac{5}{8} = \mathbf{3\frac{4}{8} + 4\frac{5}{8} = 7\frac{9}{8} = 8\frac{1}{8}}$ (3)

3.

6.2 $8\frac{2}{3} - 3\frac{1}{4} = \mathbf{8\frac{8}{12} - 3\frac{3}{12} = 5\frac{5}{12}}$ (3)

6.3 $4\frac{1}{2} + 2\frac{3}{4} - 3\frac{2}{6} = \mathbf{4\frac{6}{12} + 2\frac{9}{12} - 3\frac{4}{12} = 3\frac{11}{12}}$ (4)

6.4 $8\frac{7}{8} - 3\frac{1}{2} + 2\frac{1}{6} = \mathbf{8\frac{21}{24} - 3\frac{12}{24} + 2\frac{4}{24} = 7\frac{13}{24}}$ (4)

7.1.1 $\frac{4}{5}$ van 60 $= \mathbf{\frac{4}{5} \times \frac{60}{1} = \frac{240}{5} = 48}$ (3)

7.1.2 $\frac{2}{3}$ van 36 $= \mathbf{\frac{2}{3} \times \frac{36}{1} = \frac{72}{3} = 24}$ (3)

7.1.3 $\frac{6}{9}$ van 81 $= \mathbf{\frac{6}{9} \times \frac{81}{1} = \frac{486}{9} = 54}$ (3)

7.1.4 $2\frac{4}{5}$ van 40 $= \mathbf{\frac{14}{5} \times \frac{40}{1} = \frac{560}{5} = 112}$ (3)

7.1.5 $3\frac{1}{4}$ van 20 $= \mathbf{\frac{13}{4} \times \frac{20}{1} = \frac{260}{4} = 65}$ (3)

7.1.6 $\frac{3}{5}$ van $\frac{1}{2} = \mathbf{\frac{3}{5} \times \frac{1}{2} = \frac{3}{10}}$ (2)

7.1.7 $\frac{7}{6}$ van $\frac{2}{3} = \mathbf{\frac{7}{6} \times \frac{2}{3} = \frac{14}{18} = \frac{7}{9}}$ (3)

7.1.8 $1\frac{2}{5}$ van $\frac{1}{4} = \mathbf{\frac{7}{5} \times \frac{1}{4} = \frac{7}{20}}$ (2)

7.2.1 $\mathbf{\frac{4}{5} \times \frac{20}{20} = \frac{80}{100} = 80\%}$ 7.2.2 $\mathbf{\frac{3}{10} \times \frac{10}{10} = \frac{30}{100} = 30\%}$ (6)

7.2.3 $\mathbf{\frac{34}{40} \div \frac{2}{2} = \frac{17}{20} \times \frac{5}{5} = \frac{85}{100} = 85\%}$ 7.2.4 $\mathbf{\frac{12}{30} \div \frac{3}{3} = \frac{4}{10} \times \frac{10}{10} = \frac{40}{100} = 40\%}$ (10)

7.3.1 5% van 50 $= \mathbf{\frac{5}{100} \times \frac{50}{1} = \frac{250}{100} = 2{,}5}$ (3)

7.3.2 25% van 60 $= \mathbf{\frac{25}{100} \times \frac{60}{1} = \frac{1500}{100} = 15}$ (3)

7.3.3 50% van 150 $= \mathbf{\frac{50}{100} \times \frac{150}{1} = \frac{7500}{100} = 75}$ (3)

7.3.4 80% van 200 $= \mathbf{\frac{80}{100} \times \frac{200}{1} = \frac{16000}{100} = 160}$ (3)

7.4 $\mathbf{\frac{3}{5} = R12 \therefore \frac{1}{5} = \frac{12}{3} = R4 \therefore \frac{5}{5} = 5 \times 4 = R20}$ (5)

7.5.1 $\frac{3}{7}$ **van 49 albasters =** x $\frac{3}{7}$ **x** $\frac{49}{1}$ **=** $\frac{147}{7}$ **= 21 Hy verloor 21 albasters** (5)

4.

7.5.2 **49 – 21 =** y **49 – 21 = 28 Hy het 28 albasters oor** (2)

7.6.1 $\frac{5}{30} = \frac{1}{6}$ 7.6.2 $\frac{5}{6}$ (2)

Afdeling C – Desimale breuke

1. Lees die volgende getalle hardop:

398,3 2 607,82 34 729,765 673 912,048

2.1 In breukvorm: 0,345 = 0 + $\frac{3}{10}$ + $\frac{4}{100}$ + $\frac{5}{1000}$ (1)

2.2 In desimale vorm: 4,789 = 4 + 0,7 + 0,08 + 0,009 (1)

3.1 12 3.2 8 3.3 3,46
3.4 23,09 3.5 5,614 3.6 17,109 (6)

4.1 4,701 < 4,71 4.2 2,101 > 2,011
4.3 4,12 = 4,120 4.4 7, 11 = 7, 110 (4)

5. 7,34; 7,11; 7,1; 7,043; 7,011; 0,701 (1)

6.1.1 $\frac{3}{4}$ = 0,75 6.1.2 $\frac{4}{5}$ = 0,8

6.1.3 $\frac{32}{40}$ = 0,8 6.1.4 $\frac{18}{30}$ = 0,6 (4)

6.2.1 0,28 = $\frac{28}{100} = \frac{14}{50} = \frac{7}{25}$ 6.2.2 0,06 = $\frac{6}{100} = \frac{3}{50}$

6.2.3 0,498 = $\frac{498}{1000} = \frac{249}{500}$ 6.2.4 0,5 = $\frac{5}{10} = \frac{1}{2}$ (4)

7.1 23,235 + 8,35 – 17,864 = 13,721 (3)
7.2 64,123 – 45,65 + 51,073 = 69,546 (3)

8.1 43,456 x 9 = 391,104 (1)
8.2 0,123 x 27 = 3,321 (3)
8.3 10,602 8.4 0,0123 (6)
8.5 87,04 x 10 = 870,4 8.6 94,348 x 100 = 9 434,8 (2)
8.7 1,652 x 1 000 = 1 652 of 1 652,0 8.8 6,38 ÷ 10 = 0,638 (2)
8.9 93,07 ÷ 100 = 0,9307 8.10 560,34 ÷ 1 000 = 0,56034 (2)