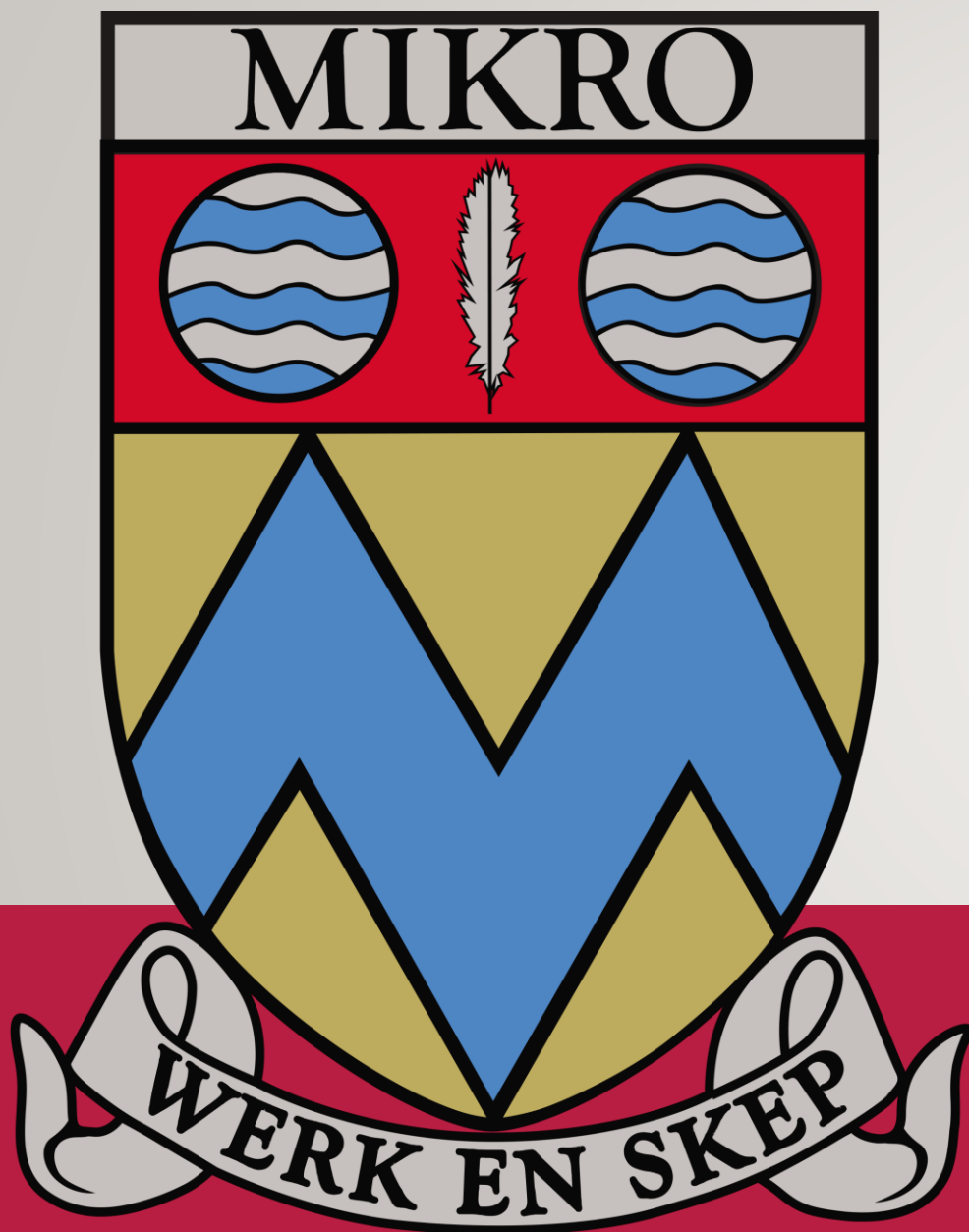




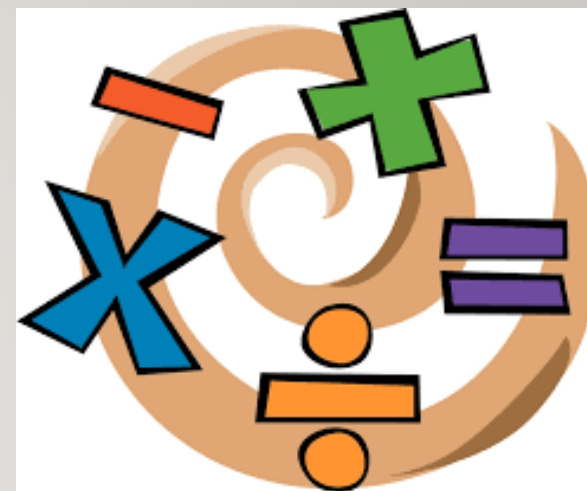
WISKUNDE

Graad 6

Week 7

Memorandum

1 – 5 Junie 2020



1. Gebruik wenkeborde om hierdie delings te doen.

Skat eers jou antwoorde.

a) $868 \div 14$

Skatting:

$900 \div 15 = 60$

			6	2	
1	4		8	6	8
	-		7	0	0
			1	6	8
	-		1	4	0
			2	8	
	-		2	8	
			0		

	50 x 14
	10 x 14
	2 x 14
	62

Wenkebord

100 x 14 = 1 400	÷2
50 x 14 = 700	÷10
10 x 14 = 140	
2 x 14 = 28	

1. Gebruik wenkeborde om hierdie delings te doen.

Skat eers jou antwoorde.

b) $636 \div 21$

$$\begin{array}{r}
 \text{21} \overline{) 636} \\
 \underline{630} \\
 6
 \end{array}$$

30 x 21

3 0 res 6

Skatting:

$$600 \div 20 = 30$$

Wenkebord

$10 \times 21 =$	210	$\times 2$ 
$20 \times 21 =$	420	
$30 \times 21 =$	630	

1. Gebruik wenkeborde om hierdie delings te doen.

Skat eers jou antwoorde.

c) $908 \div 52$

Skatting:

$$900 \div 50 = 18$$

I 7 res 24

5	2	9 0 8 - 7 8 0 1 2 8 - 1 0 4 2 4	15×52 2×52 17
---	---	---	---

Wenkebord

$10 \times 52 =$	520	↺ ÷ 2 ↻
$5 \times 52 =$	260	
$15 \times 52 =$	780	
$2 \times 52 =$	104	

1. $3\,060 \div 17$

$$\begin{array}{r}
 \text{100} \\
 \text{17} \overline{) 3060} \\
 \underline{- 2550} \\
 510 \\
 \underline{- 340} \\
 170 \\
 \underline{- 170} \\
 0
 \end{array}
 \qquad
 \begin{array}{l}
 150 \times 17 \\
 20 \times 17 \\
 \underline{10 \times 17} \\
 180
 \end{array}$$

100 x 17 = 1 700
50 x 17 = 850
150 x 17 = 2 550
200 x 17 = 3 400

1700 ÷ 17 = 100
850 ÷ 17 = 50
2550 ÷ 17 = 150
3400 ÷ 17 = 200

2. $3312 \div 23$

$$\begin{array}{r}
 \text{2} \quad \text{3} \quad \overline{\text{3} \quad \text{3} \quad \text{1} \quad \text{2}} \\
 - \quad \text{2} \quad \text{3} \quad \text{0} \quad \text{0} \\
 \hline
 \quad \text{1} \quad \text{0} \quad \text{1} \quad \text{2} \\
 - \quad \quad \text{9} \quad \text{2} \quad \text{0} \\
 \hline
 \quad \quad \quad \text{9} \quad \text{2} \\
 - \quad \quad \quad \text{9} \quad \text{2} \\
 \hline
 \quad \quad \quad \quad \text{0}
 \end{array}
 \begin{array}{l}
 100 \times 23 \\
 40 \times 23 \\
 \underline{4} \times 23 \\
 144
 \end{array}$$

$100 \times 23 = 2\,300$
 $50 \times 23 = 1\,150$
 $25 \times 23 = 575$
 $12.5 \times 23 = 287.5$

The diagram illustrates the doubling method for multiplication. It shows a sequence of equations where both the multiplier and the multiplicand are doubled, and the result is also doubled. The final result is 2875.

Wenkebord

$$\begin{array}{r}
 \text{3 I} \\
 \hline
 5 \quad 8 \quad 2 \quad 8 \\
 - 4 \quad 6 \quad 5 \quad 0 \\
 \hline
 1 \quad 2 \quad 0 \quad 8 \\
 - \quad 9 \quad 3 \quad 0 \\
 \hline
 \quad 2 \quad 7 \quad 8 \\
 - \quad 2 \quad 4 \quad 8 \\
 \hline
 \quad \quad 3 \quad 0
 \end{array}$$

res 30

$$\begin{array}{r} \downarrow \\ 5 \times 31 = 155 \\ 2 \times 31 = 62 \\ 1 \times 31 = 31 \\ 8 \times 31 = 248 \end{array}$$

Vergelyk hoeveelhede

Aktiwiteit 4 bl. 130 no. 1 tot 4

Gebruik 'n tabel om hoeveelhede van verskillende soorte te vergelyk.

1. Bereken die koste van 1 item as:

a) 28 items R1 260 kos

Skatting: $10 \times 28 = 280$ **te laag**
 $100 \times 28 = 2\,800$ **te hoog**

$\div 28$ 

Pare	Koste
28	R1 260
1	?

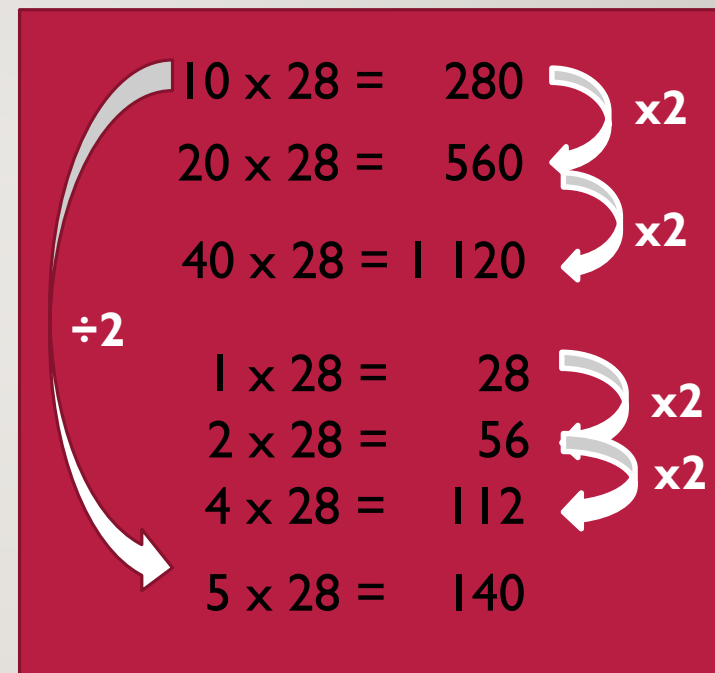
 $\div 28$

Die antwoord lê tussen 10 en 100

$$\begin{array}{r}
 \text{28} \overline{) 1260} \\
 \underline{- 1120} \\
 140 \\
 \underline{- 140} \\
 0
 \end{array}$$

45

Wenkebord



$10 \times 28 = 280$	$\times 2$
$20 \times 28 = 560$	$\times 2$
$40 \times 28 = 1120$	$\div 2$
$1 \times 28 = 28$	$\times 2$
$2 \times 28 = 56$	$\times 2$
$4 \times 28 = 112$	
$5 \times 28 = 140$	

$\therefore$ Een item kos R45

Inverse

Kontroleer met jou sakrekenaar $R45 \times 28 = R1\ 260$

Vergelyk hoeveelhede

Aktiwiteit 4 bl. 130 no. 1 tot 4

Gebruik 'n tabel om hoeveelhede van verskillende soorte te vergelyk.

1. Bereken die koste van 1 item as:

b) 36 items R1 998 kos

Skatting: $10 \times 36 = 380$ **te laag**
 $100 \times 36 = 3\,600$ **te hoog**

$\div 36$ 

Pare	Koste
36	R1 998
1	?

 $\div 36$

Die antwoord lê tussen 10 en 100

Wenkebord

$$\begin{array}{rcl}
 100 \times 36 & = & 3\,600 \\
 50 \times 36 & = & 1\,800 \\
 10 \times 36 & = & 360 \\
 5 \times 36 & = & 180
 \end{array}$$

Diagram showing the breakdown of 100 into 50, 10, and 5, with arrows indicating the multiplication process and the final result of 180.

$$\begin{array}{r}
 \text{3 6} \overline{) 1\,998} \\
 \underline{- 1\,800} \\
 198 \\
 \underline{- 180} \\
 18
 \end{array}$$

5 5 res 18

50 x 36

5 x 36

55

- As die res van R18 deur 36 gedeel word is die antwoord 50c

∴ Een item kos **R55,50**

Inverse



Kontroleer met jou sakrekenaar $R55,50 \times 36 = R1\,998,00$

Vergelyk hoeveelhede

Aktiwiteit 4 bl. 130 no. 1 tot 4

Gebruik 'n tabel om hoeveelhede van verskillende soorte te vergelyk.

1. Bereken die koste van 1 item as:

c) 48 items R2 172 kos

Skatting: $10 \times 48 = 480$ **te laag**
 $100 \times 48 = 4\ 800$ **te hoog**

Pare	Koste
48	R2 172
1	?

$\div 48$   $\div 48$

Die antwoord lê tussen 10 en 100

Wenkebord

$$\begin{array}{r}
 \text{4 5 res 12} \\
 \text{4 8} \overline{) 2172} \\
 \underline{- 1920} \quad 40 \times 48 \\
 252 \\
 \underline{- 240} \quad 5 \times 36 \\
 12 \quad 45
 \end{array}$$

$$\begin{array}{r}
 100 \times 48 = 4800 \\
 50 \times 48 = 2400 \\
 - 10 \times 48 = 480 \\
 \hline
 40 \times 48 = 1920 \\
 5 \times 48 = 240
 \end{array}$$

Diagram showing the breakdown of 100 into 50, 40, and 5, with corresponding multiplication and division steps (÷2, ÷10, ÷2) indicated by arrows.

As die res van R12 deur 48 gedeel word is die antwoord 25c (12 is 'n kwart ($\frac{1}{4}$) van 48)

∴ Een item kos **R45,25**

Inverse



Kontroleer met jou sakrekenaar $R45,25 \times 48 = R2\,172,00$

Vergelyk hoeveelhede

Aktiwiteit 4 bl. 130 no. 1 tot 4

Gebruik 'n tabel om hoeveelhede van verskillende soorte te vergelyk.

1. Bereken die koste van 1 item as:

d) 25 items R1 630 kos

Skatting: $10 \times 25 = 250$ **te laag**
 $100 \times 25 = 2\,500$ **te hoog**

$\div 25$ 

Pare	Koste
25	R1 630
1	?

 $\div 25$

Die antwoord lê tussen 10 en 100

Wenkebord

$$\begin{array}{r}
 \text{25} \overline{) 1630} \\
 \underline{- 1250} \\
 380 \\
 \underline{- 375} \\
 5
 \end{array}$$

65 res 5

$$\begin{array}{r}
 100 \times 25 = 2\,500 \\
 50 \times 25 = 1\,250 \\
 10 \times 25 = 250 \\
 + 5 \times 25 = 125 \\
 \hline
 15 \times 25 = 375 \\
 20 \times 25 = 500
 \end{array}$$

Diagram showing relationships: $100 \times 25 = 2\,500 \xrightarrow{\div 2} 50 \times 25 = 1\,250 \xrightarrow{\div 10} 10 \times 25 = 250 \xrightarrow{\times 2} 20 \times 25 = 500$. A downward arrow points to the addition of $5 \times 25 = 125$ to $10 \times 25 = 250$ to get $15 \times 25 = 375$.

As die res van R5 deur 25 gedeel word is die antwoord 20c

(5 is 'n vyfde ($\frac{1}{5}$) van 25)

$\therefore$ Een item kos **R65,20**

Inverse

Kontroleer met jou sakrekenaar $R65,20 \times 25 = R1\,630,00$



Aktiwiteit 4 bl. 130 nr. 1 tot 4

03/06/2020

2. a) Hoeveelheid bokse = $8\ 952 \div 72$
= 124

1 2 4 res 24

$$\begin{array}{r} 72 \overline{) 8952} \\ \underline{7200} \\ 1752 \\ \underline{1440} \\ 312 \\ \underline{288} \\ 24 \end{array} \quad \begin{array}{l} (100 \times 72) \\ (20 \times 72) \\ (4 \times 72) \end{array}$$

124

Wenkeltord

$100 \times 72 = 7\ 200$	$\div 2$
$50 \times 72 = 3\ 600$	
$25 \times 72 = 1\ 800$	$\div 2$
$10 \times 72 = 720$	
$20 \times 72 = 1\ 440$	$\times 2$
$5 \times 72 = 360$	
$1 \times 72 = 72$	$\times 2$
$2 \times 72 = 144$	
$4 \times 72 = 288$	$\times 2$

$\therefore$ Daar is altesaam 124 bokse nodig.

b) 24 appels bly oor.



Aktiwiteit 4 bl. 130 nr. 1 tot 4

03/06/2020

2. c) $\frac{24}{72}$

Vereenvoudig deur bo en onder deur 2 te deel

$$= \frac{12}{36}$$

Vereenvoudig deur bo en onder deur 3 te deel

$$= \frac{1}{3}$$

of

$$\frac{24}{72}$$

Vereenvoudig deur bo en onder deur 12 te deel

$$= \frac{2}{6}$$

Vereenvoudig deur bo en onder deur 2 te deel

$$= \frac{1}{3}$$

$\therefore$ Die appels wat oorbly is 'n derde van die boks.

d) Daar is 12 appels in 1 dosyn. $(72 \div 6 = 12)$



LAERSKOO
MIKRO

The logo of Laerskool Mikro is a shield-shaped emblem. At the top, the word "MIKRO" is written in black capital letters on a white background. Below this, the shield is divided into three horizontal sections: a red top section with two white circles containing blue wavy lines, a yellow middle section with a blue zigzag line, and a blue bottom section with a yellow zigzag line. At the base of the shield is a white banner with the text "WERK EN SKOOL" in black capital letters.

3.	$a)$ Antal liter = $8\,736 \div 12$ $= 728 \text{ l}$
----	--

Winkelbord

			7	2	8	
1	2		8	7	3	6
-			7	2	0	0
			1	5	3	6
-			1	2	0	0
				3	3	6
-				2	4	0
					9	6
-					9	6
						0
						728

Diagram illustrating the relationship between multiplication and division:

- $100 \times 12 = 1\,200$
- $200 \times 12 = 2\,400$
- $400 \times 12 = 4\,800$
- $600 \times 12 = 7\,200$
- $10 \times 12 = 120$
- $20 \times 12 = 240$
- $8 \times 12 = 96$

Curved arrows indicate the relationships:

- From $100 \times 12 = 1\,200$ to $200 \times 12 = 2\,400$: $\times 2$
- From $200 \times 12 = 2\,400$ to $400 \times 12 = 4\,800$: $\times 2$
- From $400 \times 12 = 4\,800$ to $600 \times 12 = 7\,200$: $\times 2$
- From $10 \times 12 = 120$ to $20 \times 12 = 240$: $\times 2$
- From $100 \times 12 = 1\,200$ to $10 \times 12 = 120$: $\div 10$

$\therefore$ Jim het altesaam 728 l brandstof gebruik in die jaar.



Aktiwiteit 4 bl. 130 nr. 1 tot 4

03/06/2020

$$\begin{aligned} 3. b) \text{ Brandstofkoste} &= 728 \times R_{10,50} \\ &= R_{7\ 644,00} \end{aligned}$$

$$\begin{array}{r} R_{7\ 280} \\ + \underline{R\ 364} \\ R_{7\ 644} \end{array}$$

$$\begin{aligned} &728 \times R_{10} \\ &= R_{7\ 280,00} \end{aligned}$$

$$\begin{aligned} &728 \div 2 \\ &= R_{364,00} \end{aligned}$$

$\therefore$ Die brandstof kos R7 644 vir die jaar.



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3. c) Brandstofkosten per maand = $\text{R} 7\ 644 \div 12$
= $\text{R} 637$

Winkelbord

$$\begin{array}{r}
 \text{6} \quad \text{3} \quad \text{7} \\
 \text{1} \quad \text{2} \quad \text{7} \quad \text{6} \quad \text{4} \quad \text{4} \\
 - \quad \quad \quad \text{7} \quad \text{2} \quad \text{0} \quad \text{0} \quad \quad \quad (600 \times 12) \\
 \hline
 \quad \quad \quad \text{4} \quad \text{4} \quad \text{4} \\
 - \quad \quad \quad \text{3} \quad \text{6} \quad \text{0} \quad \quad \quad (30 \times 12) \\
 \hline
 \quad \quad \quad \text{8} \quad \text{4} \\
 - \quad \quad \quad \text{8} \quad \text{4} \quad \quad \quad (7 \times 12) \\
 \hline
 \quad \quad \quad \text{0} \quad \quad \quad 637
 \end{array}$$

100 x 12 = 1 200

200 x 12 = 2 400

400 x 12 = 4 800

600 x 12 = 7 200

10 x 12 = 120

20 x 12 = 240

30 x 12 = 360

7 x 12 = 84

x2

x2

÷10

x2

$\therefore$ Jim benodig R637 per maand vir brandstof.



Aktiwiteit 4 bl. 130 nr. 1 tot 4

03/06/2020

$$\begin{aligned} 4. a) \text{ Aantal lae} &= 6\,624 \div 32 \\ &= 207 \end{aligned}$$

$$\begin{array}{r} \overline{207} \\ 32 \overline{) 6624} \\ \underline{- 6400} \\ 224 \\ \underline{- 224} \\ 0 \end{array} \quad \begin{array}{l} (200 \times 32) \\ (7 \times 32) \end{array}$$

207

Wenkbord

$$\begin{aligned} 100 \times 32 &= 3\,200 \\ 200 \times 32 &= 6\,400 \end{aligned} \quad \begin{array}{l} \curvearrowright \times 2 \end{array}$$

$$\begin{aligned} 10 \times 32 &= 320 \\ 5 \times 32 &= 160 \\ \downarrow + 2 \times 32 &= 64 \\ 7 \times 32 &= 224 \end{aligned} \quad \begin{array}{l} \curvearrowright \div 2 \end{array}$$

$\therefore$ Daar is 207 lae blikkies.



Aktiwiteit 4 bl. 130 nr. 1 tot 4

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4. b) Aantal lae = $6\ 624 \div 36$
 $= 184$

			1	8	4	
3	6		6	6	2	4
-			5	4	0	0
			1	2	2	4
-			9	0	0	
			3	2	4	
-			3	2	4	
			0			
						184

$\therefore$ Daar is 184 lae blikkies.

Wenkabord

$100 \times 36 = 3\ 600$	$\times 2$	$\div 2$
$200 \times 36 = 7\ 200$		
$50 \times 36 = 1\ 800$	$\div 2$	
$150 \times 36 = 5\ 400$		
$25 \times 36 = 900$	$\downarrow$	
$10 \times 36 = 360$		
$1 \times 36 = 36$		
$9 \times 36 = 324$		



Aktiwiteit 4 bl. 130 nr. 1 tot 4

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4. c) Aantal lae = $6\,624 \div 48$
= 138

$$\begin{array}{r} \text{1 3 8} \\ \text{4 8} \overline{) 6\,624} \\ \underline{- 6\,000} \quad (125 \times 48) \\ 624 \\ \underline{- 624} \quad (13 \times 36) \\ 0 \end{array}$$

138

Wenkbord

$$\begin{array}{l} 100 \times 48 = 4\,800 \\ 50 \times 48 = 2\,400 \\ 25 \times 48 = 1\,200 \end{array} \left. \begin{array}{l} \\ \\ \end{array} \right\} \begin{array}{l} \div 2 \\ \div 2 \end{array}$$

$$125 \times 48 = 6\,000$$

$$10 \times 48 = 480$$

$$2 \times 48 = 96$$

$$+ 1 \times 48 = 48$$

$$13 \times 48 = 624$$

$\therefore$ Daar is 138 lae blikkies.



Aktiwiteit 4 bl. 130 nr. 1 tot 4

03/06/2020

4. c) Aantal lae = $6\ 624 \div 96$
= 69

$$\begin{array}{r} \text{69} \\ 96 \overline{) 6624} \\ \underline{5760} \\ 864 \\ \underline{864} \\ 0 \end{array} \quad \begin{array}{l} (60 \times 96) \\ (9 \times 96) \end{array}$$

69

Wenkbord

$$\begin{array}{l} 100 \times 96 = 9\ 600 \\ 50 \times 96 = 4\ 800 \\ 10 \times 96 = 960 \\ + \\ 60 \times 96 = 5\ 760 \\ - \\ 1 \times 96 = 96 \\ 9 \times 96 = 864 \end{array} \quad \begin{array}{l} \div 2 \\ \downarrow \\ + \\ \downarrow \\ - \end{array}$$

$\therefore$ Daar is 69 lae blikkies.

Maak seker Mamma of Pappa teken op bl
127 van julle DBO Rooiboeke