

**Graad 4 – Boek B**  
***Onderwysershandleiding***  
**(CAPS uitgawe)**  
**Hersien vir 2023**

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# Hoofstuk B1


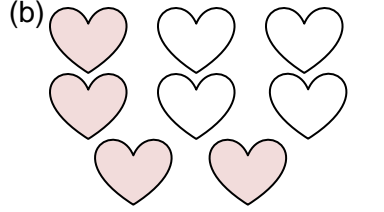
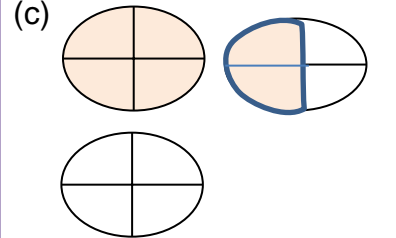
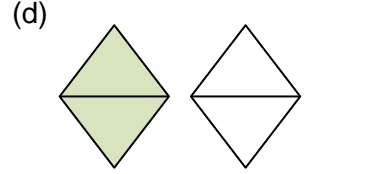
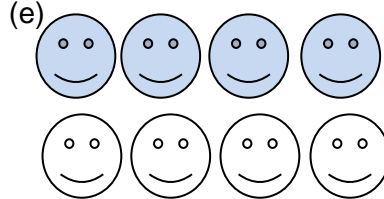
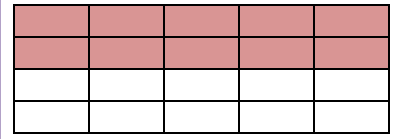
## Breuke

### B1.1 Beginnels van breuke:

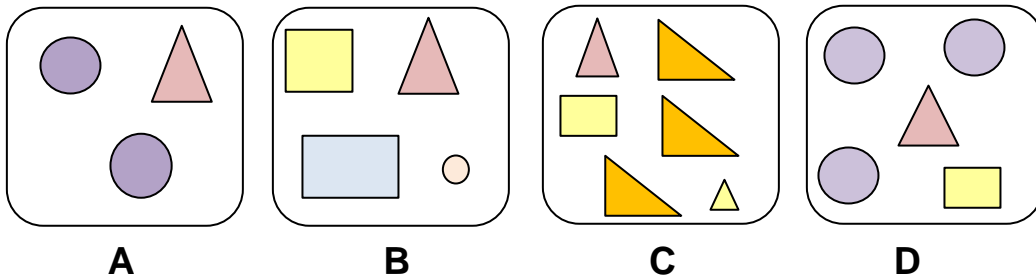
#### Oefening 1:

Datum: \_\_\_\_\_

(1) Kleur elke keer die helfte van die vorms in.

(a) 	(b) 	(c) 
(d) 	(e) 	(f) 

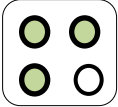
(2) Kyk na die blokke en beantwoord die vrae.

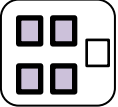



- |   |                                 |
|---|---------------------------------|
| a) Hoeveel vorms is daar in die blok A?                           | <u>3</u>                        |
| b) Watter breukdeel van die vorms in blok A is driehoeke?         | <u><math>\frac{1}{3}</math></u> |
| c) Hoeveel vorms is daar in die blok D?                           | <u>5</u>                        |
| d) Watter breukdeel van die vorms in blok D is vierkante?         | <u><math>\frac{1}{5}</math></u> |
| e) Watter breukdeel van die vorms in blok B is sirkels?           | <u><math>\frac{1}{4}</math></u> |
| f) Watter breukdeel van die vorms in blok C is nie driehoeke nie? | <u><math>\frac{1}{6}</math></u> |




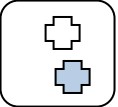
(3) Watter breukdeel is elke keer *nie* ingekleur *nie*?

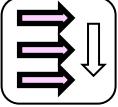
(a)   $\frac{1}{4}$

(b)   $\frac{1}{5}$

(c)   $\frac{1}{3}$

(d)   $\frac{1}{6}$

(e)   $\frac{1}{2}$

(f)   $\frac{1}{4}$


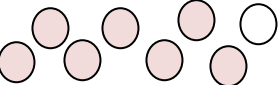

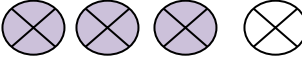
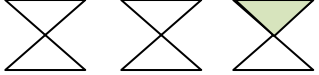
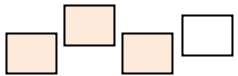
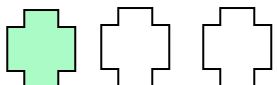
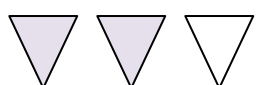
Een van die vier is nie ingekleur nie.  $\left(\frac{1}{4}\right)$

Drie van die vier is ingekleur.  $\left(\frac{3}{4}\right)$

Daar is altesaam vier kwarte.  $\left(\frac{4}{4}\right)$

$\frac{1}{4}$	$\frac{1}{4}$
$\frac{1}{4}$	$\frac{1}{4}$

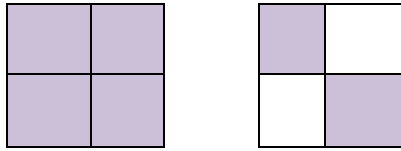
(4) Voltooi die tabel:

	BREUKDEEL INGEKLEUR	BREUKDEEL NIE INGEKLEUR NIE	SKRYF AL DIE DELE SAAM AS 'N HELE
(a) 	$\frac{4}{5}$	$\frac{1}{5}$	$\frac{5}{5}$
(b) 	$\frac{7}{8}$	$\frac{1}{8}$	$\frac{8}{8}$
(c) 	$\frac{1}{6}$	$\frac{5}{6}$	$\frac{6}{6}$
(d) 	$\frac{12}{16}$ of $\frac{3}{4}$	$\frac{4}{16}$ of $\frac{1}{4}$	$\frac{4}{4}$
(e) 	$\frac{1}{6}$	$\frac{5}{6}$	$\frac{6}{6}$
(f) 	$\frac{3}{4}$	$\frac{1}{4}$	$\frac{4}{4}$
(g) 	$\frac{1}{3}$	$\frac{2}{3}$	$\frac{3}{3}$
(h) 	$\frac{2}{3}$	$\frac{1}{3}$	$\frac{3}{3}$



(5) Dui aan of die volgende 'waar' of 'vals' is. Skryf slegs 'n 'W' of 'V' neer.

(a)



Daar is 2 heles.

Waar

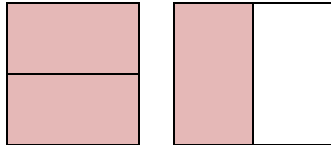
Daar is 8 kwarte

Waar

Daar is 10 kwarte ingekleur.

Vals

(b)



Daar is 4 heles.

Vals

Daar is 4 halwes.

Waar

Twee halwes is ingekleur.

Vals

Een hele is ingekleur.

vals

(6) Kleur die breuke in.

<p>(a) <math>\frac{1}{4}</math></p>	<p>(b) <math>\frac{1}{2}</math></p>	<p>(c) <math>\frac{2}{4}</math></p>
<p>(d) <math>\frac{3}{8}</math></p>	<p>(e) <math>\frac{2}{10}</math></p>	<p>(f) <math>\frac{1}{2}</math></p>
<p>(g) <math>\frac{1}{8}</math></p>	<p>(h) <math>\frac{2}{6}</math></p>	<p>(i) <math>\frac{5}{10}</math></p>

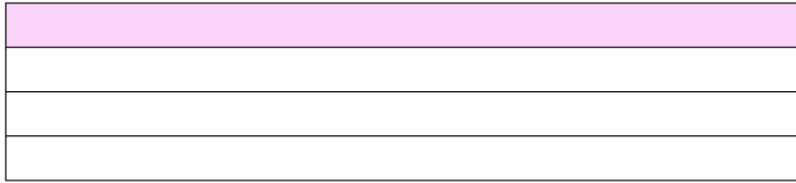




**Oefening 2:**

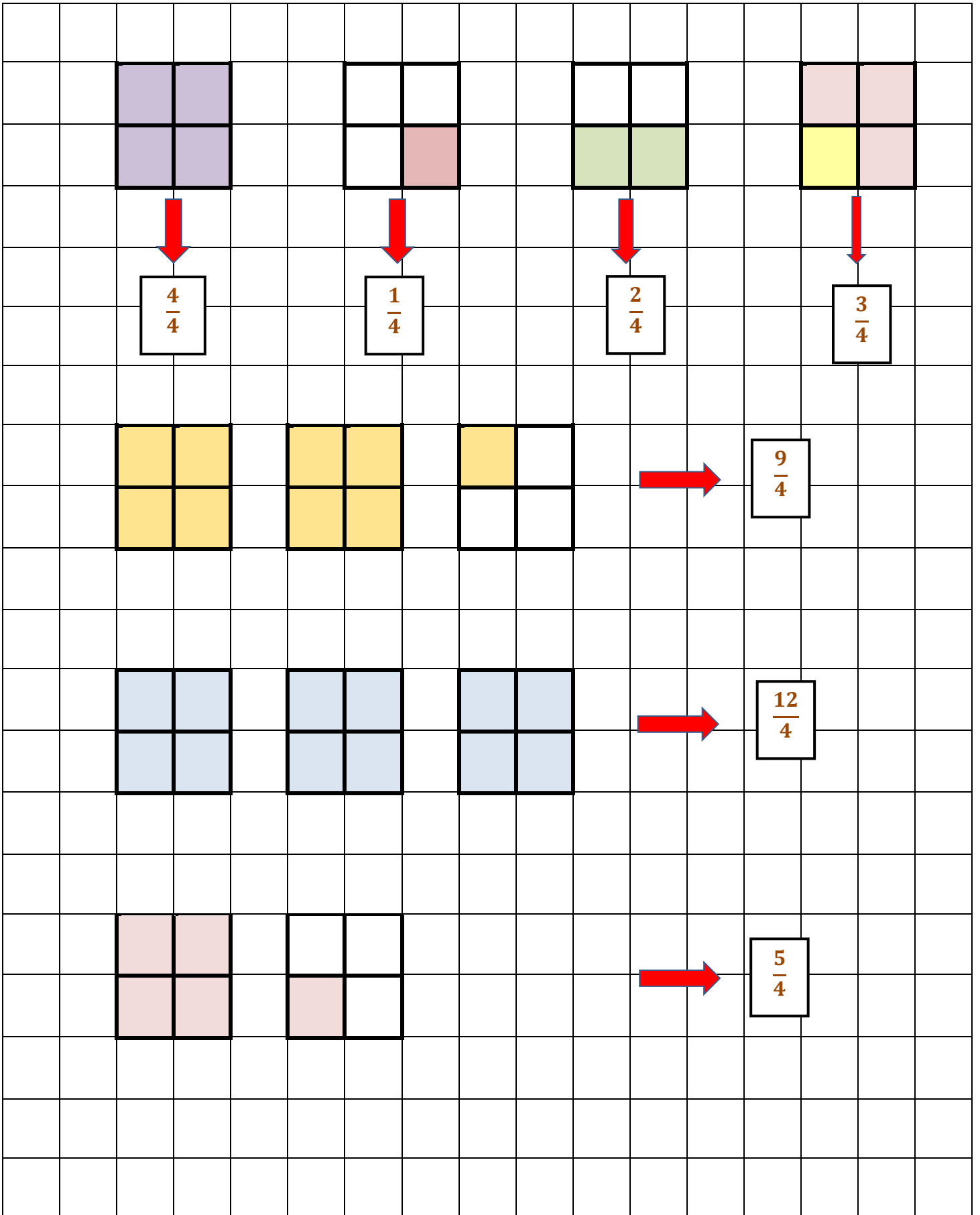
Datum: \_\_\_\_\_

Hierdie is in kwarte gedeel. Om 'n blok in kwarte te deel, deel ons dit in 4 ***gelyke dele***.



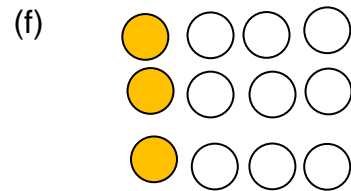
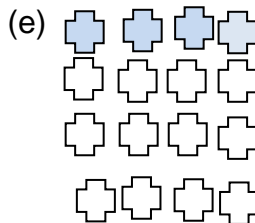
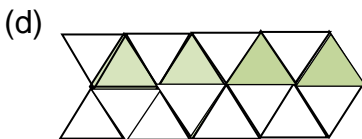
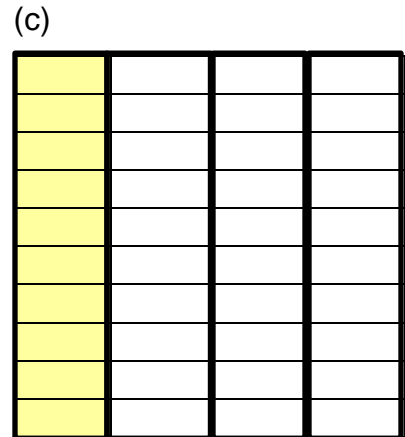
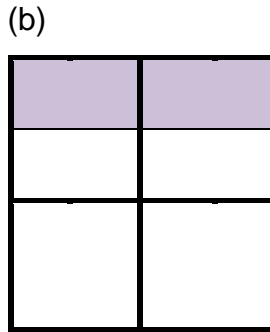
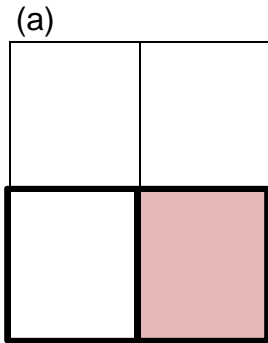
(1) Verdeel eers die vorms en kleur dit in soos gevra.

(a) Kleur $\frac{1}{4}$ in.	(b) Kleur $\frac{1}{3}$ in.	(c) Kleur $\frac{1}{4}$ in.
(d) Kleur $\frac{1}{4}$ in.	(e) Kleur $\frac{1}{5}$ in.	(f) Kleur $\frac{1}{10}$ in.
(g) Kleur $\frac{1}{3}$ in.	(h) Kleur $\frac{1}{6}$ in.	(i) Kleur $\frac{1}{5}$ in.



Daar is ook ander moontlikhede.

(2) (a) Kleur elke keer  $\frac{1}{4}$  in.



LEER!

$$\frac{3}{4} = \frac{\text{teller}}{\text{noemer}}$$

teller = noemer (een - hele)

teller > noemer (meer as een hele)

teller < as die noemer (minder as een hele)

(3) Dui aan watter breuk groter as 'n hele, kleiner as 'n hele of dieselfde as 'n hele is. Skryf die breuke in die regte blok.

(a)  $\frac{2}{4}$

(b)  $\frac{5}{4}$

(c)  $\frac{1}{4}$

(d)  $\frac{3}{4}$

(e)  $\frac{9}{4}$

(f)  $\frac{12}{4}$

(g)  $\frac{4}{4}$

EEN HELE	KLEINER AS EEN HELE	GROTER AS EEN HELE
$\frac{4}{4}$	$\frac{1}{4}$ $\frac{2}{4}$ $\frac{3}{4}$	$\frac{9}{4}$ $\frac{12}{4}$ $\frac{5}{4}$

(4) Gebruik bl. 10 om die breuke, soos in nr. 3 in die blokke te teken.

## HALVEER EN VERDUBBEL (Spoedtoets)

### Oefening B1A:

Datum: \_\_\_\_\_

(1) Skryf slegs die antwoord neer:

#### Verdubbel die getalle.

- |     |    |   |            |
|-----|----|---|------------|
| (a) | 7  | → | <u>14</u>  |
| (c) | 14 | → | <u>28</u>  |
| (e) | 9  | → | <u>18</u>  |
| (g) | 11 | → | <u>22</u>  |
| (i) | 15 | → | <u>30</u>  |
| (k) | 26 | → | <u>52</u>  |
| (m) | 35 | → | <u>70</u>  |
| (o) | 22 | → | <u>44</u>  |
| (q) | 45 | → | <u>90</u>  |
| (s) | 64 | → | <u>128</u> |

#### Halveer die getalle.

- |     |     |   |            |
|-----|-----|---|------------|
| (b) | 70  | → | <u>35</u>  |
| (d) | 50  | → | <u>25</u>  |
| (f) | 90  | → | <u>45</u>  |
| (h) | 30  | → | <u>15</u>  |
| (j) | 80  | → | <u>40</u>  |
| (l) | 140 | → | <u>70</u>  |
| (n) | 104 | → | <u>52</u>  |
| (p) | 116 | → | <u>58</u>  |
| (r) | 284 | → | <u>142</u> |
| (t) | 500 | → | <u>250</u> |

(2) Voltooi met halwes en heles.

(a) 4 =  halwes

(c) 6 =  halwes

(e) 9 =  halwes

(g) 8 =  halwes

(i) 5 =  halwes

(b) 12 =  halwes

(d) 16 =  halwes

(f) 17 =  halwes

(h) 19 =  halwes

(j) 15 =  halwes

(k) 13 halwes =  heles +  halwe bly oor.

(l) 23 halwes =  heles +  halwe bly oor.

(m) 15 halwes =  heles +  halwe bly oor.

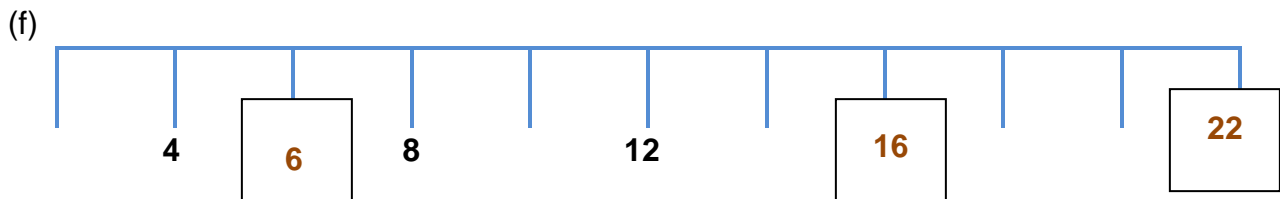
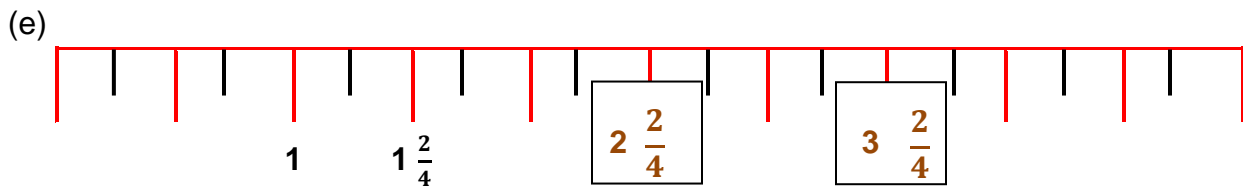
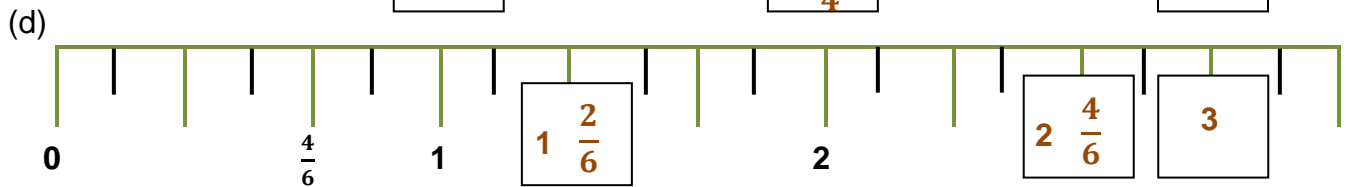
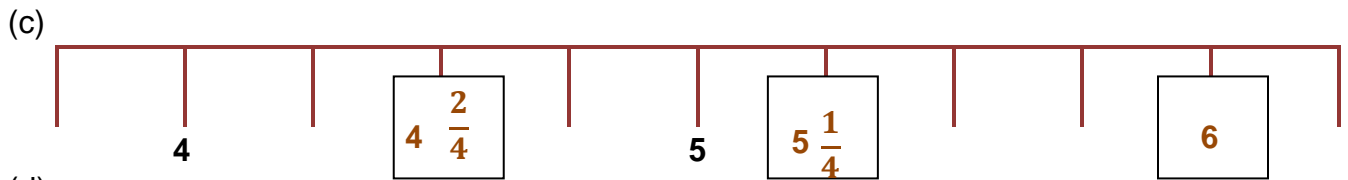
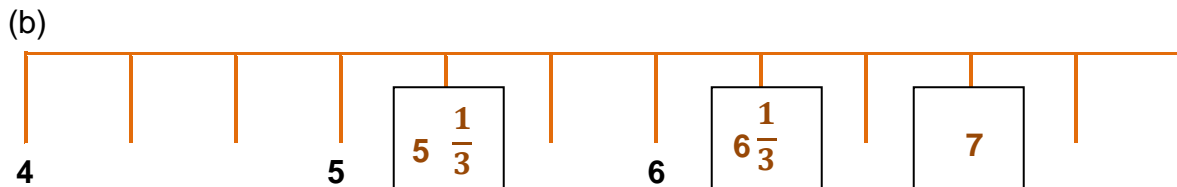
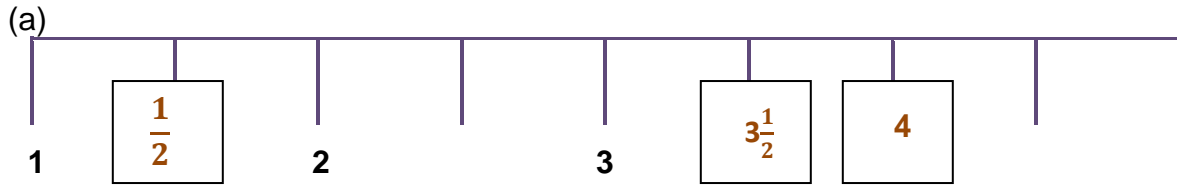
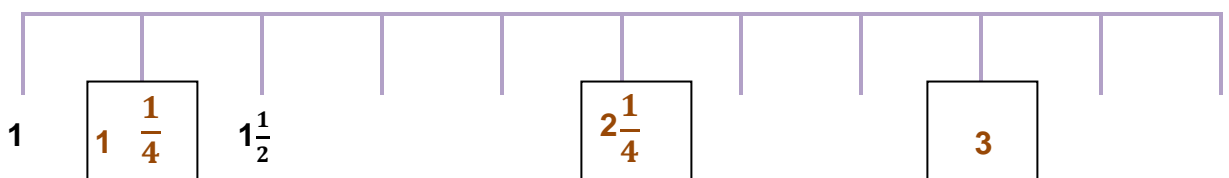
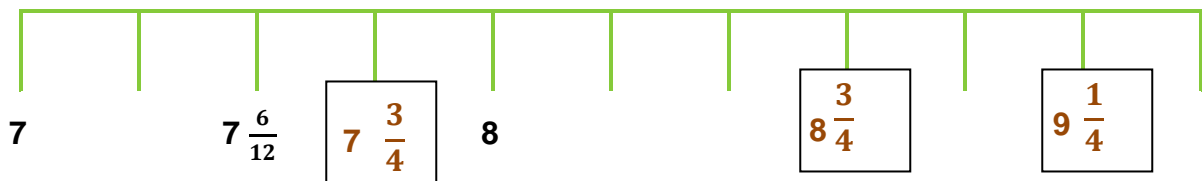
(n) 29 halwes =  heles +  halwe bly oor.

(o) 19 halwes =  heles +  halwe bly oor.

**Totaal uit 35**

**Oefening 3:**

Datum: \_\_\_\_\_

(1) **Voltooi die getallelyn. Vul slegs die getalle in wat uitgelaat is.****VIR VERRYKING:**

**KWARTE (Spoedtoets)****Oefening B1B:**

Datum: \_\_\_\_\_

(1) Skryf slegs die antwoord neer:

(a)  $1 = \underline{4}$  kwarte

(c)  $3 = \underline{12}$  kwarte

(e)  $5 = \underline{20}$  kwarte

(g)  $12 = \underline{48}$  kwarte

(i)  $2 = \underline{8}$  kwarte

(k)  $11 = \underline{44}$  kwarte

(m)  $50 = \underline{200}$  kwarte

(o)  $25 = \underline{100}$  kwarte

(q)  $40 = \underline{160}$  kwarte

(s)  $15 = \underline{60}$  kwarte

(b)  $4 \text{ kwarte} = \underline{1}$  heles

(d)  $12 \text{ kwarte} = \underline{3}$  heles

(f)  $8 \text{ kwarte} = \underline{2}$  heles

(h)  $20 \text{ kwarte} = \underline{5}$  heles

(j)  $16 \text{ kwarte} = \underline{4}$  heles

(l)  $24 \text{ kwarte} = \underline{6}$  heles

(n)  $32 \text{ kwarte} = \underline{8}$  heles

(p)  $40 \text{ kwarte} = \underline{10}$  heles

\*(r)  $100 \text{ kwarte} = \underline{25}$  heles

\*(t)  $120 \text{ kwarte} = \underline{30}$  heles

(2) Voltooi met kwartes en heles.

(a)  $5 \text{ kwarte} = \boxed{1} \text{ hele} + \boxed{1} \text{ kwart bly oor.}$

(b)  $9 \text{ kwarte} = \boxed{2} \text{ heles} + \boxed{1} \text{ kwart bly oor.}$

(c)  $14 \text{ kwarte} = \boxed{3} \text{ heles} + \boxed{2} \text{ kwarte bly oor.}$

(d)  $25 \text{ kwarte} = \boxed{6} \text{ heles} + \boxed{1} \text{ kwart bly oor.}$

(e)  $34 \text{ kwarte} = \boxed{8} \text{ heles} + \boxed{2} \text{ kwarte bly oor.}$

**Totaal uit 25**

EGTE BREUK	ONEGTE BREUK	GEMENGDE GETAL
$\frac{4}{6}$	$\frac{13}{6}$	$1\frac{1}{2}$
Die breuk is <b>kleiner</b> as 1 hele. Die teller is dus kleiner as die noemer.	Die breuk is <b>groter</b> as 1 hele. Die teller is dus groter as die noemer.	Die breuk is <b>groter</b> as 1 hele. Bestaan uit 'n heelgetal en 'n breuk.

**Oefening 4:**

Datum: \_\_\_\_\_

(1) **Klassifiseer die breuke as egte breuke, onegte breuke of gemengde getalle.**

$\frac{15}{4}$

$\frac{2}{4}$

$\frac{7}{3}$

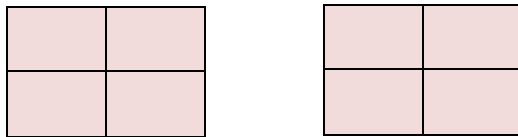
$4\frac{1}{4}$

Onegte  
breukegte  
breukonegte  
breukgemengde  
getal(2) **Omkring al die breuke wat meer as 1 hele is.**

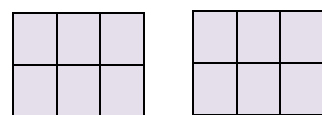
$\frac{15}{15}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{3}{2}$	$\frac{7}{4}$	$\frac{1}{1}$	$\frac{4}{4}$	$\frac{12}{2}$	$\frac{14}{4}$
-----------------	---------------	---------------	---------------	---------------	---------------	---------------	----------------	----------------

(3) **Voltooi die vrae:**

(a)

(i) Daar is  kwarte.(ii) Daar is  heles.

(b)

(i) Daar is  sesdes(ii) Daar is  heles

Breuke is eintlik ook deelsomme!

(4) **Hoeveel heles is daar?**

(a)  $\frac{4}{2} = \underline{\hspace{2cm}}$   
 $\hspace{1.5cm} \underline{\hspace{2cm}}$

(d)  $\frac{10}{2} = \underline{\hspace{2cm}}$   
 $\hspace{1.5cm} \underline{\hspace{2cm}}$

(b)  $\frac{14}{2} = \underline{\hspace{2cm}}$   
 $\hspace{1.5cm} \underline{\hspace{2cm}}$

(e)  $\frac{24}{3} = \underline{\hspace{2cm}}$   
 $\hspace{1.5cm} \underline{\hspace{2cm}}$

(c)  $\frac{12}{6} = \underline{\hspace{2cm}}$   
 $\hspace{1.5cm} \underline{\hspace{2cm}}$

(f)  $\frac{15}{3} = \underline{\hspace{2cm}}$   
 $\hspace{1.5cm} \underline{\hspace{2cm}}$

## VYFDES (Spoedtoets)

**Oefening B1C:**

**Datum:** \_\_\_\_\_

(1) Skryf slegs die antwoord neer:

(a) 1 = 5 vyfdes

(c) 4 = 20 vyfdes

(e) 5 = 25 vyfdes

(g) 3 = 15 vyfdes

(i) 8 = 40 vyfdes

(k) 10 = 50 vyfdes

(m) 12 = 60 vyfdes

(o) 6 = 30 vyfdes

(q) 7 = 35 vyfdes

(s) 9 = 45 vyfdes

(b) 5 vyfdes = 1 heles

(d) 10 vyfdes = 2 heles

(f) 20 vyfdes = 4 heles

(h) 25 vyfdes = 5 heles

(j) 15 vyfdes = 3 heles

(l) 30 vyfdes = 6 heles

(n) 50 vyfdes = 10 heles

(p) 40 vyfdes = 8 heles

\*(r) 100 vyfdes = 20 heles

\*(t) 150 vyfdes = 30 heles

(2) Voltooi met vyfdes en heles.

(a) 6 vyfdes =  hele +  vyfde bly oor.

(b) 9 vyfdes =  heles +  vyfdes bly oor.

(c) 11 vyfdes =  heles +  vyfde bly oor.

\* (d) 36 vyfdes =  heles +  vyfde bly oor.

\* (e) 34 vyfdes =  heles +  vyfdes bly oor.

**Totaal uit 25**

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(g) $\frac{12}{2} =$	<b>6</b>	(h) $\frac{36}{2} =$	<b>18</b>	(i) $\frac{48}{2} =$	<b>24</b>
(j) $\frac{20}{2} =$	<b>10</b>	(k) $\frac{30}{2} =$	<b>15</b>	(l) $\frac{70}{2} =$	<b>35</b>
(m) $\frac{16}{2} =$	<b>8</b>	(n) $\frac{40}{5} =$	<b>8</b>	(o) $\frac{56}{7} =$	<b>8</b>
(p) $\frac{14}{2} =$	<b>7</b>	(q) $\frac{30}{2} =$	<b>15</b>	(r) $\frac{64}{8} =$	<b>8</b>

1 hele							
$\frac{1}{2}$				$\frac{1}{2}$			
$\frac{1}{4}$		$\frac{1}{4}$		$\frac{1}{4}$		$\frac{1}{4}$	
$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$

**Oefening 5:**

Datum: \_\_\_\_\_

(1) Kyk na die diagram. Vul in:  $>$ ;  $<$  of  $=$ .

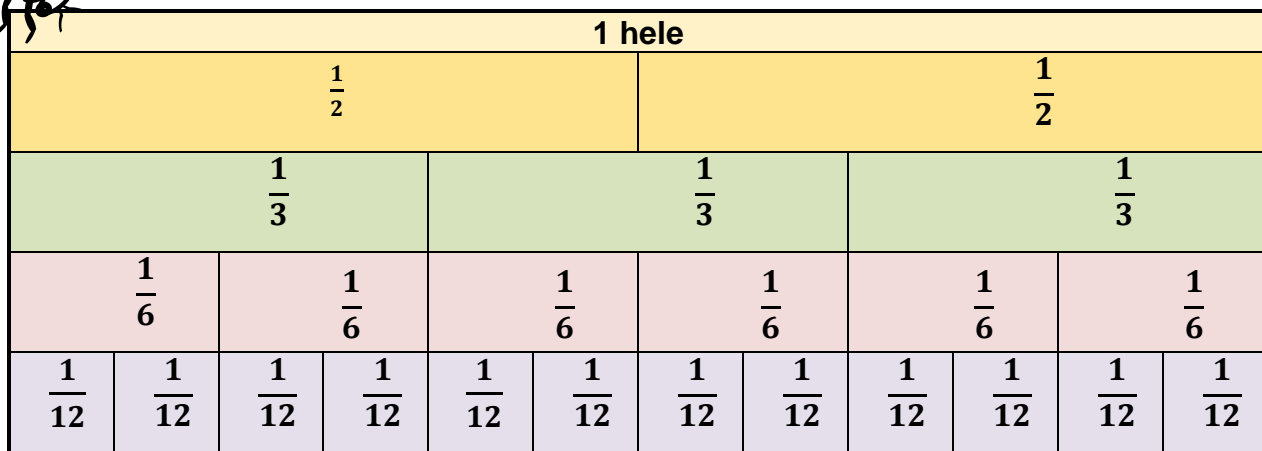
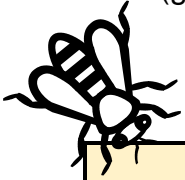
(a) $\frac{4}{8}$	$=$	$\frac{1}{2}$	(b) $\frac{1}{8}$	$<$	$\frac{1}{4}$	(c) $\frac{3}{8}$	$<$	$\frac{2}{4}$
(d) $\frac{1}{1}$	$=$	$\frac{4}{4}$	(e) $\frac{2}{8}$	$=$	$\frac{1}{4}$	(f) $\frac{2}{4}$	$=$	$\frac{1}{2}$
(g) $\frac{1}{2}$	$=$	$\frac{4}{8}$	(h) $\frac{1}{4}$	$<$	$\frac{2}{4}$	(i) $\frac{1}{20}$	$<$	$\frac{1}{10}$
(j) $\frac{8}{8}$	$=$	$\frac{20}{20}$	(k) $\frac{6}{4}$	$>$	$\frac{1}{8}$	(l) $\frac{1}{1}$	$<$	$\frac{5}{4}$
(m) $\frac{2}{2}$	$>$	$\frac{2}{8}$	(n) $\frac{7}{8}$	$<$	$\frac{4}{4}$	(o) $\frac{1}{2}$	$<$	$\frac{6}{8}$
(p) $\frac{8}{8}$	$=$	$\frac{4}{4}$	(q) $\frac{2}{2}$	$=$	1	(r) $\frac{5}{4}$	$>$	$\frac{2}{2}$
(s) 1	$=$	$\frac{8}{8}$	(t) 2	$>$	$\frac{2}{2}$	(u) 2	$>$	$\frac{8}{8}$



(2) Skryf al die breuke in die blok neer wat gelyk aan 'n half is.

$\frac{4}{6}$	$\frac{4}{8}$	$\frac{3}{9}$	$\frac{12}{24}$	$\frac{6}{10}$	$\frac{2}{3}$	$\frac{9}{10}$	$\frac{20}{40}$	$\frac{1}{3}$	$\frac{16}{18}$
$\frac{7}{14}$	$\frac{4}{5}$	$\frac{6}{12}$	$\frac{5}{10}$	$\frac{7}{8}$	$\frac{14}{28}$	$\frac{15}{30}$	$\frac{8}{10}$	$\frac{12}{20}$	$\frac{8}{16}$

- (a)  $\frac{4}{8}$  (b)  $\frac{12}{24}$  (c)  $\frac{20}{40}$   
 (d)  $\frac{7}{14}$  (e)  $\frac{6}{12}$  (f)  $\frac{5}{10}$   
 (g)  $\frac{14}{28}$  (h)  $\frac{15}{30}$  (i)  $\frac{8}{16}$



**Oefening 6:**

Datum: \_\_\_\_\_

(1) Voltooi met ekwivalente breuke:

1	=	$\frac{2}{2}$	=	$\frac{3}{3}$	=	$\frac{4}{4}$	=	$\frac{8}{8}$
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(2) Kyk na die diagram bo en beantwoord die vrae.

- (a)  $\frac{2}{6}$  = 1 derde (b)  $\frac{6}{6}$  = 1 hele  
 (c)  $\frac{2}{3}$  = 4 sesdes (d)  $\frac{4}{12}$  = 1 derde

## SESDER (Spoedtoets)

### Oefening B1D:

Datum: \_\_\_\_\_

#### (1) Skryf slegs die antwoord neer:

$$(a) \quad 1 \quad = \quad \underline{6} \quad \text{sesdes}$$

$$(c) \quad 3 \quad = \quad \underline{18} \quad \text{sesdes}$$

$$(e) \quad 6 \quad = \quad \underline{36} \quad \text{sesdes}$$

$$(g) \quad 5 \quad = \quad \underline{30} \quad \text{sesdes}$$

$$(i) \quad 9 \quad = \quad \underline{54} \quad \text{sesdes}$$

$$(k) \quad 11 \quad = \quad \underline{66} \quad \text{sesdes}$$

$$(m) \quad 12 \quad = \quad \underline{72} \quad \text{sesdes}$$

$$(o) \quad 8 \quad = \quad \underline{48} \quad \text{sesdes}$$

$$(q) \quad 20 \quad = \quad \underline{120} \quad \text{sesdes}$$

$$(s) \quad 30 \quad = \quad \underline{180} \quad \text{sesdes}$$

$$(b) \quad 6 \text{ sesdes} \quad = \quad \underline{1} \quad \text{hele}$$

$$(d) \quad 12 \text{ sesdes} \quad = \quad \underline{2} \quad \text{heles}$$

$$(f) \quad 36 \text{ sesdes} \quad = \quad \underline{6} \quad \text{heles}$$

$$(h) \quad 72 \text{ sesdes} \quad = \quad \underline{12} \quad \text{heles}$$

$$(j) \quad 18 \text{ sesdes} \quad = \quad \underline{3} \quad \text{heles}$$

$$(l) \quad 42 \text{ sesdes} \quad = \quad \underline{7} \quad \text{heles}$$

$$(n) \quad 60 \text{ sesdes} \quad = \quad \underline{10} \quad \text{heles}$$

$$(p) \quad 48 \text{ sesdes} \quad = \quad \underline{8} \quad \text{heles}$$

$$*(r) \quad 120 \text{ sesdes} \quad = \quad \underline{20} \quad \text{heles}$$

$$*(t) \quad 360 \text{ sesdes} \quad = \quad \underline{60} \quad \text{heles}$$

#### (2) Voltooi met sesdes en heles.

$$(a) \quad 8 \text{ sesdes} = \quad \boxed{1} \quad \text{hele} + \quad \boxed{2} \quad \text{sesdes bly oor.}$$

$$(b) \quad 15 \text{ sesdes} = \quad \boxed{2} \quad \text{heles} + \quad \boxed{3} \quad \text{sesdes bly oor.}$$

$$(c) \quad 19 \text{ sesdes} = \quad \boxed{3} \quad \text{heles} + \quad \boxed{1} \quad \text{sesde bly oor.}$$

$$* (d) \quad 37 \text{ sesdes} = \quad \boxed{6} \quad \text{heles} + \quad \boxed{1} \quad \text{sesde bly oor.}$$

$$* (e) \quad 50 \text{ sesdes} = \quad \boxed{8} \quad \text{heles} + \quad \boxed{2} \quad \text{sesdes bly oor.}$$

**Totaal uit 25**

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