



Gr.8

Totaal : 80

Tyd : 1,5 ure

Memorandum vir November-eksamen (Vraestel 1)

**Vraag 1**

1	$-15\checkmark$	11	$4abc - 3bc\checkmark$
2	$10\checkmark$	12	$2\checkmark$
3	$2\checkmark$	13	$3a - 7\checkmark$
4	$2a + 2b\checkmark$	14	$\frac{2a}{c^2}\checkmark$
5	$7a - 4b\checkmark$	15	$-24a^5b\checkmark$
6	$b^4\checkmark$	16	$-3x^2y - 3xy^3\checkmark$
7	$5x - 9\checkmark$	17	$-15pq^2\checkmark$
8	$3 + x\checkmark$	18	$\frac{ab}{2}\checkmark$
9	$4\checkmark$	19	$0\checkmark$
10	$-8x^6y^6\checkmark$	20	$k + k^2\checkmark$

(20)

1.2  $30\checkmark + 8\checkmark \div 2\checkmark - 10\checkmark = 24$

(4)

[24]

**Vraag 2**

2.1 vierdegraadse uitdrukking  $\checkmark$

2.2  $5\checkmark$

2.3  $-\frac{1}{2}\checkmark$

2.4  $\frac{3}{2}\checkmark$

2.5  $7\checkmark$

[5]

**Vraag 3**

3.1  $x = 2\checkmark\checkmark$

3.2  $x = 3\checkmark\checkmark\checkmark$

$$3.3 \quad x = -5 \checkmark \checkmark$$

$$3.4 \quad x = 40 \checkmark \checkmark$$

$$3.5 \quad x = 3 \checkmark \checkmark$$

$$3.6 \quad x = 2 \checkmark \checkmark$$

[16]

## Vraag 4

$$4.1 \quad 2(2a + b) - (a - b)$$

$$4a + 2b - a + b \checkmark$$

$$3a + 3b \checkmark \quad (2)$$

$$4.2 \quad 2a + b - (a - b)$$

$$a + 2b \checkmark \quad (2)$$

$$4.3 \quad x + (x + 2) + (x + 4) + (x + 6) = 72 \checkmark$$

$$4x = 60 \checkmark$$

$$x = 15 \checkmark \quad (3)$$

[7]

## Vraag 5

$$5.1.1 \quad T_n = 3n + 4 \checkmark \checkmark \quad (2)$$

$$5.1.2 \quad 154 = 3n + 4 \checkmark$$

$$150 = 3n$$

$$15 = n \checkmark \quad (2)$$

$$5.1.3.1 \quad 16; 25 \checkmark \quad (1)$$

$$5.1.3.2 \quad 97; 102 \checkmark \quad (1)$$

[6]

## Vraag 6

$$6.1 \quad \frac{10}{9} - \frac{7}{3} + \frac{1}{2} / \frac{9}{18} \checkmark$$

$$= \frac{20 - 42 + 9}{18} \checkmark$$

$$= \frac{-13}{18} \checkmark \quad (3)$$

$$6.2 \quad \sqrt{\frac{25}{16}} \times \frac{4}{3} = \frac{5}{4} \times \frac{4}{3} = \frac{5}{3} \checkmark \checkmark \quad (2)$$

$$6.3 \quad \frac{-4a}{2} + \frac{a}{4} - \frac{12a^4}{27a^3} \checkmark \checkmark$$

$$\frac{-72a+9a-16a}{36} \checkmark$$

$$\frac{-79a}{36} \checkmark \quad (4)$$

[9]

## Vraag 7

$$7.1 \quad 250 : 300 : 500 \checkmark$$

$$5 : 6 : 10 \checkmark \quad (2)$$

$$7.2 \quad 320 \times \frac{3}{16} = 60 \checkmark$$

$$320 \times \frac{5}{16} = 100 \checkmark$$

$$320 \times \frac{8}{16} = 160 \checkmark \quad (3)$$

$$7.3 \quad 43 \times \frac{3}{2} = 64,5 \text{ km} \checkmark \checkmark \quad (2)$$

**NB : AFSTAND = SPOED x TYD**

$$7.4.1 \quad 40 + (120 \times 1,5 \checkmark)$$

$$= 220 \text{ km} \checkmark \quad (2)$$

$$7.4.2 \quad \frac{40}{90} + 1,5$$

$$0,44 + 1,5 \checkmark$$

$$1,94 \text{ ure (1 uur en 56 minute)} \checkmark \quad (2)$$

$$7.4.3 \quad \frac{220}{1,94} = 113,40 \text{ km/h} \checkmark \checkmark \quad (2)$$

[13]

Totaal : [80]

---