

GRAAD 8 NOVEMBER EKSAMEN

Memorandum

Vraag 1

1.1.1 $1; 2; 3; 6; 7; 14; 21; 42$

1.1.2 $13; 26; 39; 52$

1.1.3 $3; 5; 7$

1.2.1 $\sqrt{100} = 10$

1.2.2 $-1 + 8 = 7$

1.3.1 $\frac{14}{3} + \frac{9}{4} \div \frac{3}{1} = \frac{14}{3} + \frac{3}{4} = \frac{65}{12} = 5\frac{5}{12}$

Vraag 2

2.1 $\frac{3}{5} \times \frac{180}{1} = R108$

2.2 $82,5 \text{ km} \div 0,75 \text{ uur} = 110 \text{ km/uur}$

$$385 \text{ km} \div 110 \text{ km/uur} = 3\frac{1}{2} \text{ uur}$$

2.3 $R12000 + R12000 \times \frac{8}{100} \times 5 = R12000 + R4800 = R16800$

Vraag 3

3.1 $x + x + 32 = 188$

$$2x = 156$$

$$x = 78$$

Die getalle is 78 en 110

3.2.1 $4x = 20$

$$x = 5$$

3.2.2 $10 - 4x = 3x + 9$

$$1 = 7x$$

$$\frac{1}{7} = x$$

Vraag 4

4.1 $\frac{1}{3}, \frac{1}{9}$

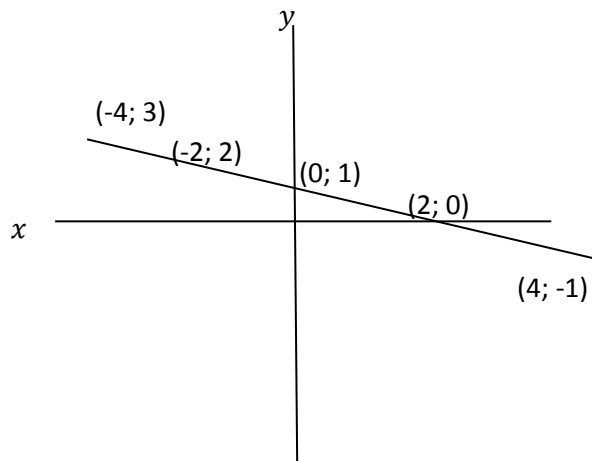
4.2.1 51 vuurhoutjies

4.2.2 $y = 5x + 1$

4.3.1

x	-4	-2	0	2	4
$y = -\frac{1}{2}x + 1$	3	2	1	0	-1

4.3.1



Vraag 5

5.1.1 4 terme

5.1.2 $-\frac{1}{3}$

5.1.3 4

5.1.4 $(-1)^2 - \frac{1}{3}(-1)^3 + 4 - (-1)(4)$

$$= 1 + \frac{1}{3} + 4 + 4$$

$$= 9\frac{1}{3}$$

5.2.1 $-3x^2 + 2x$

5.2.2 $6x^6$

5.2.3 $-4a - 30a = -34a$

5.2.4 $-9x^8$

5.2.5 $-4a^2 + 48a$

5.2.6 $-\frac{1}{3}y^2$

5.2.7 $7x^2 - 1$

AFDELING B

Vraag 6

$$6.1 \quad AB^2 = 5^2 - 4^2$$

$$AB = \sqrt{9} = 3$$

$$x^2 = 10^2 - 6^2$$

$$x = \sqrt{64} = 8$$

Vraag 7

$$7.1 \quad 5x + 6^\circ + 10x - 6^\circ = 180^\circ \text{ Gestrekte hoek}$$

$$15x = 180^\circ$$

$$x = 12^\circ$$

$$2(5x + 6^\circ) + 10x - 6^\circ + 2x + 90 = 360^\circ \text{ Omwenteling}$$

$$x = 12^\circ$$

$$7.2 \quad \angle PRQ = 65^\circ \text{ (Verwisselende hoek PS \parallel QR)}$$

$$b = 65^\circ \text{ (Hoeklyn PR halveer } \angle P; \text{ ruit)}$$

$$a = 180^\circ - (65^\circ \times 2)$$

$$a = 50^\circ \quad (\text{Binnehoeke van driehoek} = 180^\circ)$$

$$c = 50^\circ \quad (\text{Teenoorstaande hoeke van ruit PQRS})$$

$$7.3 \quad \frac{AB}{PQ} = \frac{BC}{QR} = \frac{AC}{PR}$$

$$\frac{8}{12} = \frac{6}{9} = \frac{10}{15}$$

$$\frac{2}{3} = \frac{2}{3} = \frac{2}{3}$$

Die sye van driehoek ABC en driehoek PQR is in dieselfde verhouding tot mekaar. Dus is die driehoeke gelykvormig.

Vraag 8

$$8.1 \quad Area = \frac{1}{3} \pi 15^2$$

$$= 235,62 \text{ mm}^2$$

$$8.2 \quad Omtrek = \frac{3}{4} 2\pi 6 + 12 \text{ cm of } 2\pi 6 - \frac{1}{4} 2\pi 6 + 12 \text{ cm}$$

$$= 40,27 \text{ cm}$$

$$8.3.1 \quad 0,04 \text{ km}^2 = 40000 \text{ m}^2$$

$$8.3.2 \quad 2,5 \text{ l} = 2500 \text{ cm}^3$$

$$8.3.3 \quad 38 \text{ mm}^2 = 0,38 \text{ cm}^2$$

Vraag 9

$$9.1 \quad 2\left(\frac{1}{2} \cdot 12,8\right) + 30(10 + 10 + 12)$$

$$= 1056 \text{ cm}^2$$

$$9.2 \quad (90 \times 60 \times 45) \div (15 \times 15 \times 15)$$

$$= 72 \text{ kubusse}$$

$$9.3 \quad Omtrek = (48 + 32) \times 2$$

$$= 160 \text{ mm}$$

Vraag 10

10.1.1

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

10.1.2 36

10.1.3 $50 - 19 = 31$

$$10.1.4 \quad \frac{34+36}{2} = 35$$

$$10.1.5 \quad \frac{557}{16} = 34,81$$