

Memorandum  
 Gyr 11 Klastoets Meant 2015

1.11  $x = -\frac{1}{2}$  of  $x \cdot \frac{5}{3}$  ✓

1.12  $5x^2 - x - 8 = 0$  ✓

$x = \frac{-(-1) \pm \sqrt{(-1)^2 - 4(5)(-8)}}{2(5)}$  ✓

$= \frac{1,37}{5}$  of  $-1,17$  ✓

1.13  $x - \sqrt{5+2x} = 7$

$(-\sqrt{5+2x})^2 = (7-x)^2$  ✓

$5+2x = 49 - 14x + x^2$

$x^2 - 15x + 44 = 0$  ✓

$(x-11)(x-4) = 0$  ✓

$x = 11$  of  $-4$  ✓

beds  $\therefore x = 11$  ✓

1.2.1  $(x+2)(x-3) < -3x+2$

$x^2 - x - 6 < -3x+2$

$x^2 + 2x - 8 < 0$  ✓

$(x+4)(x-2) < 0$  ✓

$-4 < x < 2$  ✓

$-3$ ;  $-2$  if  $0$ ; ✓

son  $\rightarrow -5$  ✓

1.3  $3y = 8$  |  $x+1$

$3y = 3$  |  $4x+4$  ✓

$4x+4 = x^2 - 6x - 20$  ✓

$x^2 - 10x - 24 = 0$  ✓

$(x-12)(x+2) = 0$  ✓

$x = 12$  of  $-2$  ✓

$y = 5x$  of  $-4$  ✓

2.1  $(2 - \sqrt{3a^3})^2 + a\sqrt{2a}$   
 $= 4 - 4\sqrt{3a^3} + 3a^3 + 2a\sqrt{3a}$  ✓  
 $= 4 - 4a\sqrt{3a} + 3a^3 + 2a\sqrt{3a}$  ✓  
 $= 4 - 2a\sqrt{3a} + 3a^3$  ✓ (4)

2.2  $\frac{4x^{-1} + 4^{2+1}}{17 \cdot 12^x}$   
 $= \frac{4^x (4^{-1} + 4^1)}{17 \cdot 4^x \cdot 3^x}$  of  $\frac{2^x(2^{-2} + 2^2)}{17 \cdot 2^{2x} \cdot 3^x}$   
 $= \frac{4 \cdot 4}{17 \cdot 3^x}$   
 $= \frac{3^x}{4} \cdot \frac{1}{4 \cdot 3^x}$  (3)

2.2.2  $\frac{3^2}{4} = \frac{1}{4}(3^{-2x}) = \frac{1}{4}(4^t) = t$  ✓  
 (1) [8]

3.1  $4 - 8p = 0$  ✓  
 $-8p = -4$   
 $p = \frac{1}{2}$  ✓ (2)

3.2  $4 - 8p < 0$  ✓  
 $-8p < -4$   
 $p > \frac{1}{2}$  ✓ (2)

(2)  $-\frac{1}{2}$  ✓  $\frac{5}{3}$  ✓

SV ✓  
 subst ✓

(4) antw ✓ ✓

kwadratisch ✓

SV ✓  
 faktore/formule ✓  
 altwe antw ✓  
 tests slajs/antw ✓

(5)

SV ✓  
 faktore/formule ✓  
 kritiek wissel noties

(4)

getalle ✓  
 som ✓  
 slajs antw ✓

(2)

prakties ✓  
 liges = ✓  
 SV ✓  
 faktore/formule ✓  
 2 on-wissel  
 ✓ elke y-wissel

$4 + 3a^3$  ✓  
 $-4a\sqrt{3a}$  ✓  
 $2a\sqrt{3a}$  ✓  
 antw ✓

gemene faktor ✓  
 hakies ✓  
 antw ✓

antw ✓

$\Delta = 0$  ✓

$p = \frac{1}{2}$  ✓

$\Delta < 0$  ✓

$p > \frac{1}{2}$  ✓

$$2a=6$$

$$a=3 \checkmark$$

$$-6, 1, 14, 33$$

$$3a+b=7$$

$$3(3)+b=7$$

$$b=-2 \checkmark$$

$$a+b+c=-6$$

$$3-2+c=-6$$

$$c=-7 \checkmark$$

$$2a=6 \quad a=3 \checkmark$$

$$c=-7 \checkmark$$

$$a+b+c=-6$$

$$3+b-7=-6$$

$$b=-2 \checkmark$$

$$T_n = 3n^2 - 2n - 7 \checkmark$$

(4)

$$3n^2 - 2n - 7 = \frac{1270}{1270}$$

$$3n^2 - 2n - 1727 = 0$$

$$n = \frac{-(-2) \pm \sqrt{(-2)^2 - 4(3)(-1727)}}{2(3)} \checkmark$$

$$= \frac{2 \pm \sqrt{4 + 20724}}{6}$$

$$= \frac{2 \pm 145}{6}$$

$$= \frac{147}{6} \text{ or } \frac{-143}{6}$$

$$= 24.5 \text{ or } -23.83$$

See, No Term.

(4)

$$0, x, 0$$

$$x-2$$

$$-2x=12 \checkmark$$

$$x=-6 \checkmark$$

(2)

(14)

$$4.1 \quad k=2 \checkmark$$

$$p=-11 \checkmark$$

$$k=2 \checkmark$$

$$p=-11 \checkmark$$

$$4.2 \quad AB = \sqrt{(1+5)^2 + (-4+1)^2} \checkmark$$

$$= \sqrt{145}$$

$$= 3\sqrt{5} \text{ of } (6, 7) \checkmark$$

$$(2) \text{ antw } \checkmark$$

$$4.3 \quad M_{AF} = \frac{-5-1}{-1+4} = \frac{-6}{3} = -2 \checkmark$$

$$y = -2x + c$$

$$(4, 1) \quad 1 = -2(4) + c$$

$$-7 = c \checkmark$$

$$y = -2x - 7$$

(3)

C-Winkel  $\checkmark$

$$4.4 \quad M_{\text{gesamt}} = \frac{1}{2} \checkmark$$

$$y = \frac{1}{2}x + c$$

$$-5 = \frac{1}{2}(-1) + c$$

$$-4\frac{1}{2} = c \checkmark$$

$$y = \frac{1}{2}x - 4\frac{1}{2} \checkmark$$

(3)

C-Winkel  $\checkmark$

$$4.2 \quad M_{AC} = \frac{5-1}{2+4} = \frac{4}{6} = \frac{2}{3} \checkmark$$

$$M_{BD} = \frac{4+5}{2+1} = \frac{9}{3} = 3 \checkmark$$

$$3(4+5) = 6$$

$$3(1+5) = 6$$

$$3(1+5) = 6$$

$$3(1+5) = 6$$

$M_{AC} = M_{BD} \checkmark$