Lösungen

Nr. 1

f(x) = $x_1 \cdot x_2$ und $x_1 + x_2 = 9$:	f(x) = $x_1 \cdot (9 - x_1)$	S(4.5|20.25)

Nr. 2

A = l·b und 2b + l = 30:	A(l) = l(15 - l)	S(7.5|56.25)

Nr. 3

A = a·b und 2a + b = 50	A(a) = a(50 – 2a)	S(12.5|312.5)

Nr. 4

O = $2x^2 + 4xz$ und 8x + 4z = 24	O(x) = $2x^2 + 4x(6 - 2x)$	S(2|24)

Nr. 5

y = x(x – 2) S(1| -1)

Nr.6

U = 2πr + 2l = 400 l = 200 - πr

a) A = 2rl = 2r(200 - πr) $S(\frac{100}{\pi} | \frac{20'000}{\pi})$

b) A = πr^2 + 2rl = r(400 - πr) $S(\frac{200}{\pi} | \frac{40'000}{\pi})$

Nr. 7

A = $a^2 - \frac{x^2}{2} - a(a - x) = -\frac{x^2}{2} + ax$ S(a\|0.5a^2)

Nr. 8

U = 3m = πx + 2h + 2x

A(x) = $3x - 2x^2 - \frac{x^2}{2}\pi$ S(0.42| 0.63)

Nr. 9

y = x^2- 4x + 7 – (2x – 3) = x^2- 6x + 11 S(3| 2), d = 1

Nr. 10

6a + b = 84

A(a) = 2a(84 – 6a) S(7| 588)

Nr. 11

$A = \frac{\pi r^2 \alpha}{360}$ und u = b + 2r	$A(r) = \frac{r}{2}$ (u – 2r)	$S(\frac{u}{4} \| \frac{u^2}{16})$, α = 114.6°