

S. 130

Nr. 3

a)

x	(1) $y = x^2$	(2) $y = x^3$
0,8	0,64	0,512
1,3	1,69	2,197
-1,3	1,69	-2,197

b)

y	(1) $y = x^2$ $x =$	(2) $y = x^3$ $x =$
2	$\approx 1,41$ und $\approx -1,41$	$\approx 1,26$
3	$\approx 1,73$ und $\approx -1,73$	$\approx 1,44$

Nr. 4

a) $y = x^1$ $-4 = -4^1$ wahr

b) $y = x^2$ $2 \neq 4^2$ somit nicht wahr

c) $y = x^3$ $2,744 = 1,4^3$ wahr

Nr. 5

a) $y = x^3$ P (3|27) Q (2|8) R (-1|-1)

b) $y = x^1$ P ($\frac{2}{3}$ | $\frac{2}{3}$) Q (-1,7|-1,7) R ($-\frac{2}{5}$ | $-\frac{2}{5}$)

c) $y = x^2$ P ($\sqrt{2}$ | 2) Q ($\frac{5}{2}$ | 6,25) R ($-\sqrt{3}$ | 3)
oder Q ($-\frac{5}{2}$ | 6,25)

Nr. 6

a) $f(7) = 7^3 = 343$

b) $f(-4) = (-4)^3 = -64$

c) $f(0,5) = 0,5^3 = 0,125$

d) $f(-\frac{2}{3}) = (-\frac{2}{3})^3 = -\frac{8}{27}$

e) $f(-1,3) = (-1,3)^3 = -2,197$

S. 130

Nr. 7 (1) $y = x^2 + 1$

(2) $y = 3x^2$

(3) $y = 0,5x^2$

(4) $y = (x+1)^2 - 3$

S. 132

Nr. 14 a) $(-3,2)^3 < (-2,4)^3 < (-1,8)^3 < 0^3 < 3,6^3 < 4,1^3$

b) $0^2 < (-1,8)^2 < (-2,4)^2 < (-3,2)^2 < 3,6^2 < 4,1^2$

Nr. 15 a) $y = x^3$ $P_1 (4 \mid 64)$

$P_2 (3 \mid 27)$

$P_3 (-3 \mid -27)$

$P_4 (\frac{1}{2} \mid 10,125)$

b) $y = x^2$ $P_1 (-2 \mid 4)$

$P_2 (0,2 \mid 10,04)$

$P_3 (-0,2 \mid 10,04)$

$P_4 (0 \mid 10)$