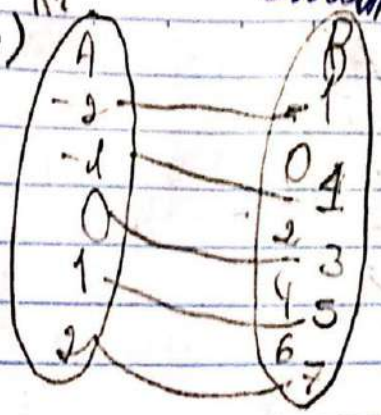
data • •

Guilherme Amorim

(1) a) R1



$y = 2x + 3$

$y = 2(-2) + 3 = -1$

$y = 2(-1) + 3 = 1$

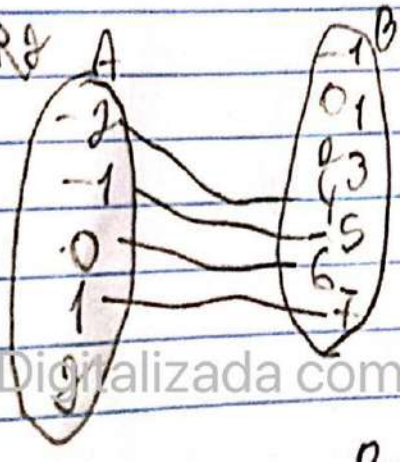
$y = 2(0) + 3 = 3$

$y = 2 \cdot 1 + 3 = 5$

$y = 2 \cdot 2 + 3 = 7$

É função

b) R2



$y = x + 6$

$y = -2 + 6 = 4$

$y = -1 + 6 = 5$

$y = 0 + 6 = 6$

$y = 1 + 6 = 7$

$y = 2 + 6 = 8$

Não é função

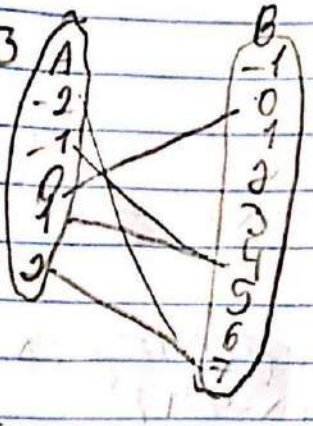
CS Digitalizada com CamScanner

8

$Y = 1 + 16 = 7$

$Y = 2 + 16 = 8$

c) R3



$Y = X^2 + 3$

$-2^2 + 3 = 7$

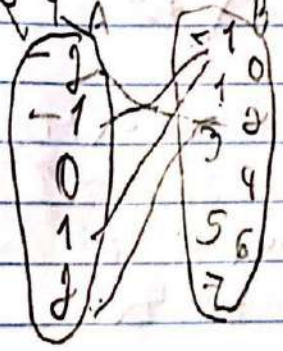
$-1^2 + 3 = 4$

$0^2 + 3 = 3$

$1^2 + 3 = 4$

$2^2 + 3 = 7$

d) R4



$Y = X^2 - 2$

$Y = -2^2 - 2 = 2$

$Y = -1^2 - 2 = -1$

$Y = 0^2 - 2 = -2$

$Y = 1^2 - 2 = -1$

$Y = 2^2 - 2 = 0$

não é função

9) a) Injetora
b) Bijetora
c) Bijetora
d) Sobrejetora

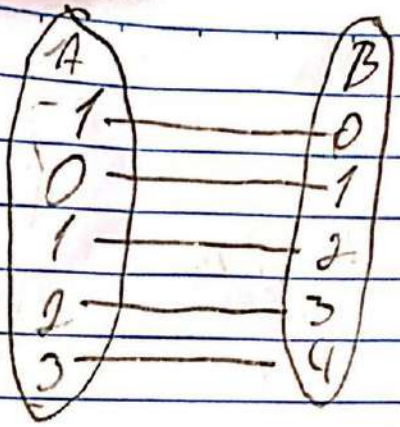
Digitalizada com CamScanner

Jandaia

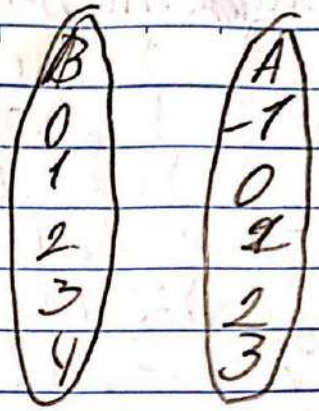
data

S T Q Q S S

(3)

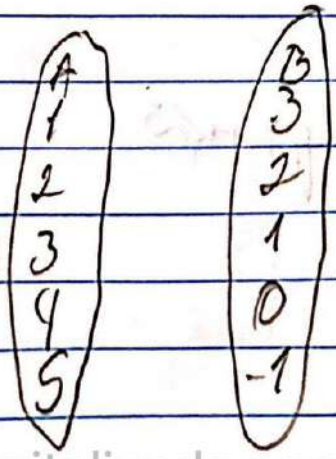


$Y = X + 1$



f^{-1}

(4)



$Y = X + 4$

$f^{-1}(3) = 1$

CS Digitalizada com CamScanner

(5) (-1)

$y = x + 4$

(5) $f(x) = x - 4$, $g(x) = -2x + 1$, $h(x) = x^2 - 1$

e) $f \circ g(x) = f(-2x+1)$
$-2x + 1 - 4$
$f \circ g(x) = -2x - 3$

f) $g \circ h(x) = g(x^2 - 1)$
$-2(x^2 - 1) + 1$
$g \circ h(x) = -2x^2 + 3$

a) $f \circ g(2) = -2 \cdot 2 - 3 = -7$

b) $g \circ f(3) = -2 \cdot 3 + 1 = +3$

h) $h \circ f(-2) \rightarrow f(-2) = -6 \rightarrow h \circ f(-2) = 35$

f) $f \circ g(x) = f(x-4)$
$= 2(x-4) + 7$
$g \circ f = -2x + 9$

h) $h \circ g(x) = h(-2x+8)$
$(-2x+7)(-2x+7) - 1$
$4x^2 - 4x + 7 - 7$
$h \circ g(x) = 4x^2 - 4x$

c) $f \circ h(-1) =$
$h(-1) = 0$
$f \circ h(-1) = -4$

Digitalizada com CamScanner

Jandaia

data

S T Q Q S S D

(6) a) $f \circ g\ (1,2)$

$f(1,2) = 2$

$f \circ g(1,2) = 2^2 - 2 = 2$

b) $f \circ g\ (-2,6)$

$f(-2,6) = -2$

$f \circ g(-2,6) = -2^2 - 2 = 2$

(7) a) $f \circ g\ (1,2)$

$f(1,2) = 1$

$f \circ g(1,2) = 1^2 - 2 = -1$

b) $f \circ g\ (-2,6)$

$f(-2,6) = -3$

$f \circ g(-2,6) = -3^2 - 2 = 7$

Digitalizada com CamScanner