Resolução do questionário do Socrative

1. A C, porque a cada objeto, corresponde uma e uma só imagem.

D = {-2,-1,0,1}. D’ = {0,1,4}.

1. 2.1) a) a função h.

 b) a função g.

2.2) f(x) = $\frac{1}{2}$x : declive: $\frac{1}{2}$ e ordenada na origem: 0.

 g(x) = 2x – 1 : declive: 2 e ordenada na origem: -1.

2.3) (x,0) – zero da função

 0 = 2x – 1 <=> -2x = -1-0 <=> $\frac{-2x}{-2}$ = $\frac{-1}{-2}$ <=> x = $\frac{1}{2}$

 R.: ($\frac{1}{2}$,0).

2.4) a) f(3) + g(1) = $\frac{1}{2}$x3 + 2x1 -1 = $\frac{3}{2}$ + 1 = $\frac{3}{2}$ + $\frac{2}{2}$ = $\frac{5}{2}$

 b) 2 h(0) = 2x3 = 6

 c) f(2) x h(1) – g(0) = $\frac{1}{2}$x2 x 3 -2x0 -1 = 1x3 + 1 = 3 + 1 = 4

2.5)

|  |  |  |  |
| --- | --- | --- | --- |
| x | f(x) | g(x) | h(x) |
| 0 | 0 | -1 | 3 |
| 1 | $$\frac{1}{2}$$ | 1 | 3 |



1. 2 pontos : (-2,0) ; (0,1)

a = $\frac{1-0}{0-(-2)}$ = $\frac{1}{2}$

b = 1

R.: y = $\frac{1}{2}$x + 1.

1. 2 pontos : (-1,2) ; (2,-2)

a = $\frac{-2-2}{2-(-1)}$ = $-\frac{4}{3}$

ponto (-1,2)

2 = $-\frac{4}{3}$ x (-1) + b <=> 2 = $\frac{4}{3}$ + b <=> b = $\frac{6}{3}$ - $\frac{4}{3}$ <=> b = $\frac{2}{3}$

R.: y = $-\frac{4}{3}$x + $\frac{2}{3}$.

4.1) retas paralelas, mesmo declive: $-\frac{4}{3}$

 ponto (0,-1) b = -1

 R.: y = $-\frac{4}{3}$x – 1.

1. 5.1) 2 pontos: (-2,-2) ; (5,2)

 a = $\frac{2-(-2)}{5-(-2)}$ = $\frac{4}{7}$

 ponto (-2,-2)

 -2 = $\frac{4}{7}$ x (-2) + b <=> -2 = $-\frac{8}{7}$ + b <=> b = $-\frac{14}{7}$ + $\frac{8}{7}$ <=> b = $-\frac{6}{7}$

 R.: y = $\frac{4}{7}$x $-\frac{6}{7}$.

 5.2) a) R.: (0,$-\frac{6}{7}$).

 b) (x,0) – zero da função

 0 = $\frac{4}{7}$x $-\frac{6}{7}$ <=> $-\frac{4}{7}$x = $-\frac{6}{7}$ – 0 <=> $\frac{-\frac{4x}{7}}{-\frac{4}{7}}$ = $\frac{-\frac{6}{7}}{-\frac{4}{7}}$ <=> x = $\frac{3}{2}$

 R.: ($\frac{3}{2}$,0).