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Subject:

$$\{ (r, r) (n, a) (r, n-r) (m, r) (-1, r) \}$$

$m=r$

$$n-r-n=r$$

$$n-r-n-r=0$$

$$(n-r)(n+1) < \frac{n-r \checkmark}{n-r-1 \checkmark}$$

$$\Rightarrow \{ (-1, 1) (1, r) (r, r) (a, m-r) (a, r, n) \}$$

$$(m, r) \}$$

$$m=r$$

$$(a, r) \quad \frac{-1+r}{1}$$

$$a-r=1$$

$$(n-r)$$

$$\textcircled{r}$$

$$\textcircled{r}$$

$$\textcircled{1) \quad x_1 + 2 = x_2^3 + 2}$$

$$x_1^3 = x_2^3$$

$$x_1 = x_2 \checkmark$$

$$f^{-1}(n) = x_2 y^r + r$$

$$\Rightarrow y = \frac{x+r}{x+r}$$

$$\frac{x+2x_1}{x_1+2} = \frac{4+2x_2}{x_2+2}$$

$$(4+2x_1)(x_2+2) = (4+2x_2)(x_1+2)$$

$$\text{Expanding} \quad 4x_2 + 8 + 2x_1x_2 + 4x_1$$

$$\text{Expanding} \quad 4x_1 + 8 + 2x_1x_2 + 4x_2$$

Therefore

(ii)

$$\sqrt{x_1-3} = \sqrt{x_2-3}$$

— (4)

$$x_1-3 = x_2-3$$

$$x = \sqrt{y-3}$$

$$\checkmark x_1 = x_2$$

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$$(x^r - rx + r) - 1 = (x - 1)^r - 1$$

$\alpha > 0$

$$S_L \rightarrow (r_2 - r)$$

$$f(1) = 1 - r + r_2 - 1 = \alpha$$

$$f(r) = 1 - r + r_2 - 1$$

$\alpha = 1$

$\alpha = 1$

$$\text{ii)} \quad \frac{3x_1 + 1}{x_1 - 1} = \frac{3x_2 + 1}{x_2 - 2}$$

(d)

$$(3x_1 + 1)(x_2 - 2) = (3x_2 + 1)(x_1 - 2)$$

$$3x_1x_2 - 6x_1 + x_2 - 2 = 3x_2x_1 - 6x_2 + x_1 - 2$$

$$3x_1x_2 - 6x_1 + x_2 - 2 = 3x_2x_1 - 6x_2 + x_1 - 2$$

$$-6x_1 + x_2 = -6x_2 + x_1$$

$$-7x_1 = -7x_2$$

$$\checkmark x_1 = x_2$$

$$f^{-1}(x) = \frac{x^r y + 1}{y - r}$$