

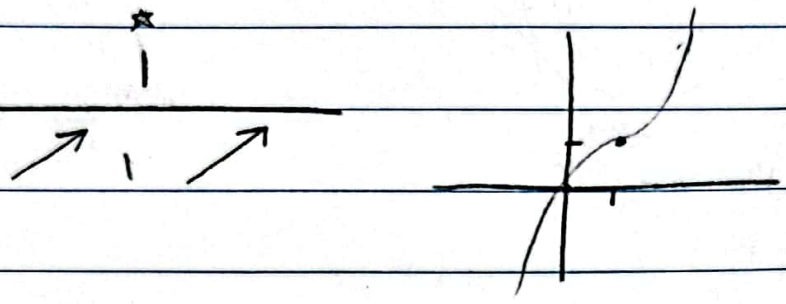
Subject: _____
Year. _____ Month. _____ Date. _____

$$x^3 - 3x^2 + 3x$$

1

$$3x^2 - 6x + 3 = 0 \quad x^2 - 2x + 1 = 0 \rightarrow x=1$$

نقطه
عبدای



الف) $\frac{-x^3 + 4}{x^2} \quad -3x^2(x^2) - 2x(-x^3 + 4)$

2

$$\frac{-3x^4 + 2x^2 - 8x}{x^4} \quad -x^4 - 8x = 0 \rightarrow x=0$$

$$\frac{-3x^4 + 2x^2 - 8x}{x^4} \quad -x(n^3 + 8) = 0 \rightarrow n = -2$$

$$x^4 = 0 \quad x = 0$$

ب) $\frac{x^3}{x^2 - 1} \quad 3x^2(x^2 - 1) - 2x(x^3)$

$$\frac{3x^4 - 3x^2 - 2x^4}{(x^2 - 1)^2} = 0$$

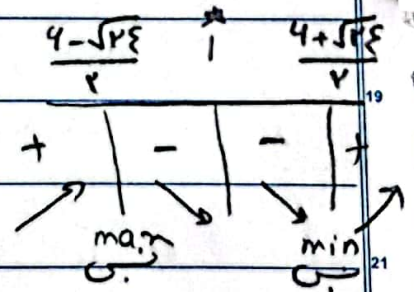
$$x^2 - 1 = 0 \quad x = \pm 1 \quad x = \pm \sqrt{1}$$

الف) $\frac{-x^2 + 4x + 1}{x - 1} \quad (-2x + 4) - (-x^2 + 4x + 1)$

3

$$\frac{x^2 - 4x + 4}{(x - 1)^2}$$

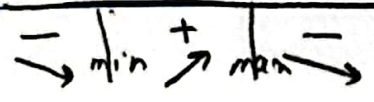
$$x^2 - 4x + 4 = \left(\frac{4 + \sqrt{4-4}}{2}\right)^2$$



ب) $\frac{x^2 - 4x + 1}{x - 1} \quad (2x - 4) - (x^2 - 4x + 1)$

$$\frac{-x^2 + 4x - 2}{(x - 1)^2}$$

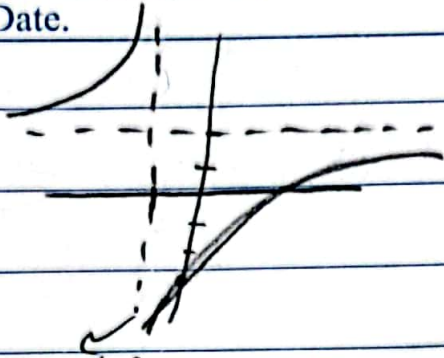
Almas



Subject:

Year. Month. Date.

$$y = \frac{rx + k}{x - 1}$$



کتابت افقی $y = r$

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$$x = \frac{ry + k}{y - 1}$$

$$xy - x = ry + k$$

$$xy - ry = x + k$$

$$y(x - r) = x + k$$

$$y = \frac{x + k}{x - r}$$

کتابت عمودی $x = -1$

$$\frac{ax + f}{x - b}$$

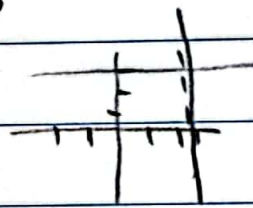
$r \rightarrow$ عمودی
 $k \rightarrow$ افقی

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$$x - b \quad r - b = 0 \quad b = r$$

$$a = k$$

$$\frac{rx + k}{x - r}$$



$$\frac{rx + k}{x - r}$$

$$\rightarrow \frac{ry + k}{y - r} = x$$

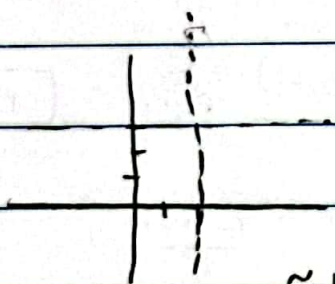
$$ry + k = xy - rx$$

$$ry - xy = -rx - k$$

$$y(r - x) = -rx - k$$

$$y = \frac{-rx - k}{r - x}$$

$$1 = \frac{-rx - k}{r - x} \quad x + 1$$



مردم
گوراز
لقله $\frac{r}{x} + \frac{k}{r}$

$$-x + d = \frac{-rx - k}{r - x}$$

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۶ نقطه بحرانی جاهایی که $f' = 0$ بیفورد با محور x \leftarrow \bar{x}

ناصرفرد $f' = 0 \leftarrow$ \bar{x}

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$$\Delta > 0 \quad a^2 f(1)(r) > 0 \quad a^2 - \Delta > 0 \quad a^2 > \Delta$$

$$a > r \leq ac - f$$

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Almas

Date

No

9

$$\frac{x^r + r}{x^r + n + r}$$

$$\frac{r(x^r + n + r) - (r+1)(x^r + r)}{(x^r + n + r)^r}$$

$$\cancel{rx^r} + rnr + \cancel{r^2} - \cancel{rx^r} - \cancel{r^2} - r$$

$$\frac{x^r - r}{(x^r + n + r)^r} \rightarrow \Delta <$$

$$\sqrt{r} \rightarrow \frac{r}{\sqrt{r} + r + r}$$

$$-\sqrt{r} = \frac{r}{r - \sqrt{r} + r}$$

$$x^r - r = 0 \quad x = \pm \sqrt{r}$$

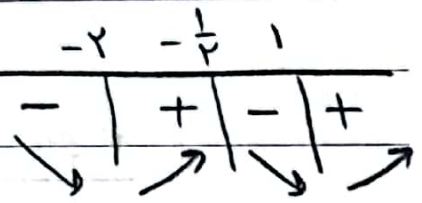
$$\frac{r}{r - \sqrt{r}} \times \frac{r}{r + \sqrt{r}} = \frac{14}{14 - r} = \frac{14}{1r} = \frac{1}{r}$$

1a

سوال
جواب = -r
ع. = -1

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

$$\frac{-1+r}{r} = \frac{-1-r}{r}$$

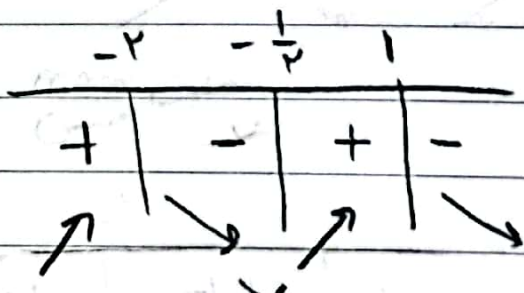


-1/r man
G

$$(x^r + n - r)^r$$

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

$$\frac{-1+r}{r} = \frac{-1-r}{r}$$



$$-\frac{1}{r} = -\left(-\frac{1}{r}\right) = 0$$