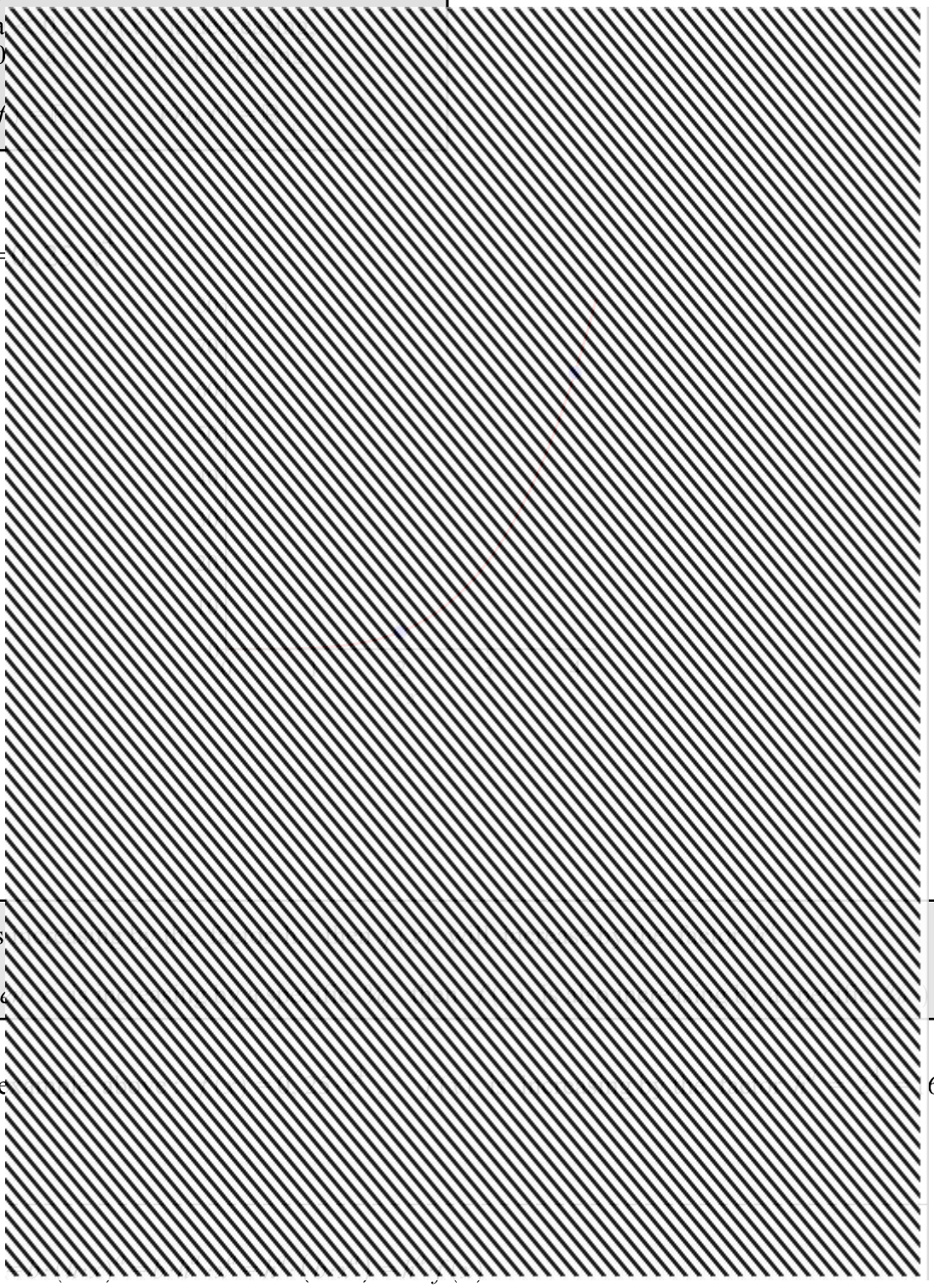
Power function

$$f(x) = b \cdot x^{a}$$

$b > 0$
For a
For 0

$Dm(f$

$f(x) =$



If x is

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$f(h \cdot x)$

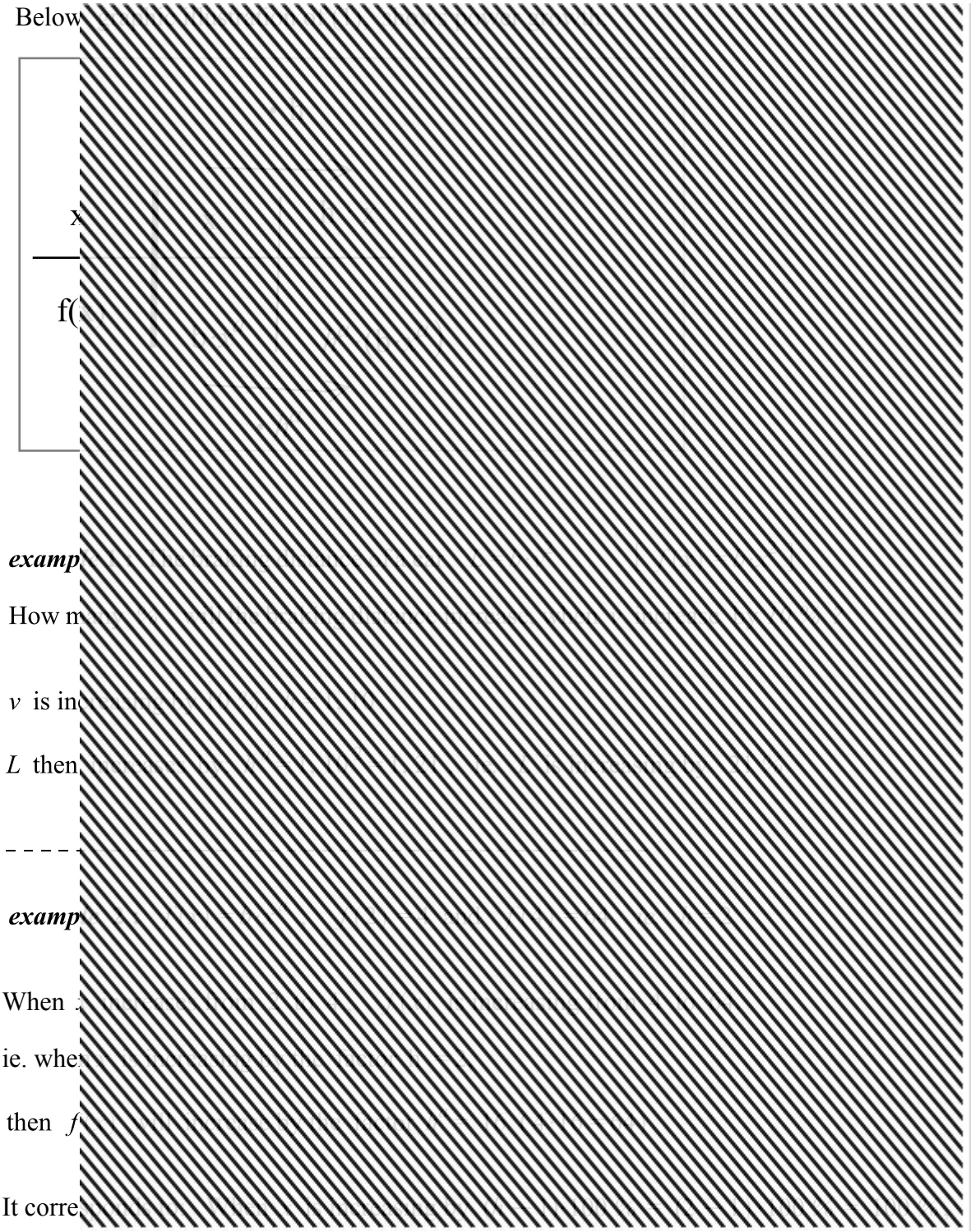
□

$$f(h \cdot x) = h^{a} \cdot f(x) \qquad (\mathbf{1})$$

Using (1), we get:

$$\Delta f = f(h \cdot x) - f(x) = h^a \cdot f(x) - f(x) = f(x) \cdot [h^a - 1] \quad , \quad \Delta f = f(x) \cdot [h^a - 1] \quad (2)$$

Below



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Then $f(x)$ is increasing by $(h^a - 1) \cdot 100\ \% = (16 - 1) \cdot 100\ \% = 1500\ \%$, as seen in (2)

Calculation of a and b:

$f(x) = b \cdot x^a$, $f(2) = 4$ and $f(4) = 64$

$a = \frac{\log(\quad)}{\log(\quad)} = 4$

$f(x) =$

ie. $a =$