

Numbers and Operations/Algebra: Benefits Manager

Micron Technology, Inc.

Job Description: Responsible for the development, implementation and maintenance of the company's benefits programs including time off, sick pay, unemployment, retirement plans, disability, and group and life insurance.

Problem:

An employee's 401(k) contributions plus his employer's matching contributions and Return On Equity (ROE) contributions must be less than or equal to 25% his gross pay (minus insurance premiums and 401 (k) contributions.)

Employees whose percentage is greater than 25% are entitled to a refund.

If my salary and contributions match those listed below, what is my actual percentage? What should my 401(k) refund be to decrease the percentage to 25%?

IRS formula: $K + M + R = .25 (G - K - P)$

K = \$3,000 401(k) contributions

M = \$1,500 Employer's matching contributions

R = \$400 ROE contributions

G = \$20,000 Gross Pay

P = \$800 Pre-tax Insurance Premiums

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Solution:

Actual Percentage = $(3000 + 1500 + 400) / (20000 - 3000 - 800) = 4900/16200 = .302$ (30.2% actual percentage)

Allowable Contributions = $(x + 1500 + 400) / (20000 - x - 800) = .25$

$x = \$2,320$

Refund = Actual Contributions - Allowable Contributions

Refund = $K - x$

$3000 - 2320 = \$680$ Refund