

Lavien, Olivia, Gavin

College Algebra

18, 61, 64, 66, 67

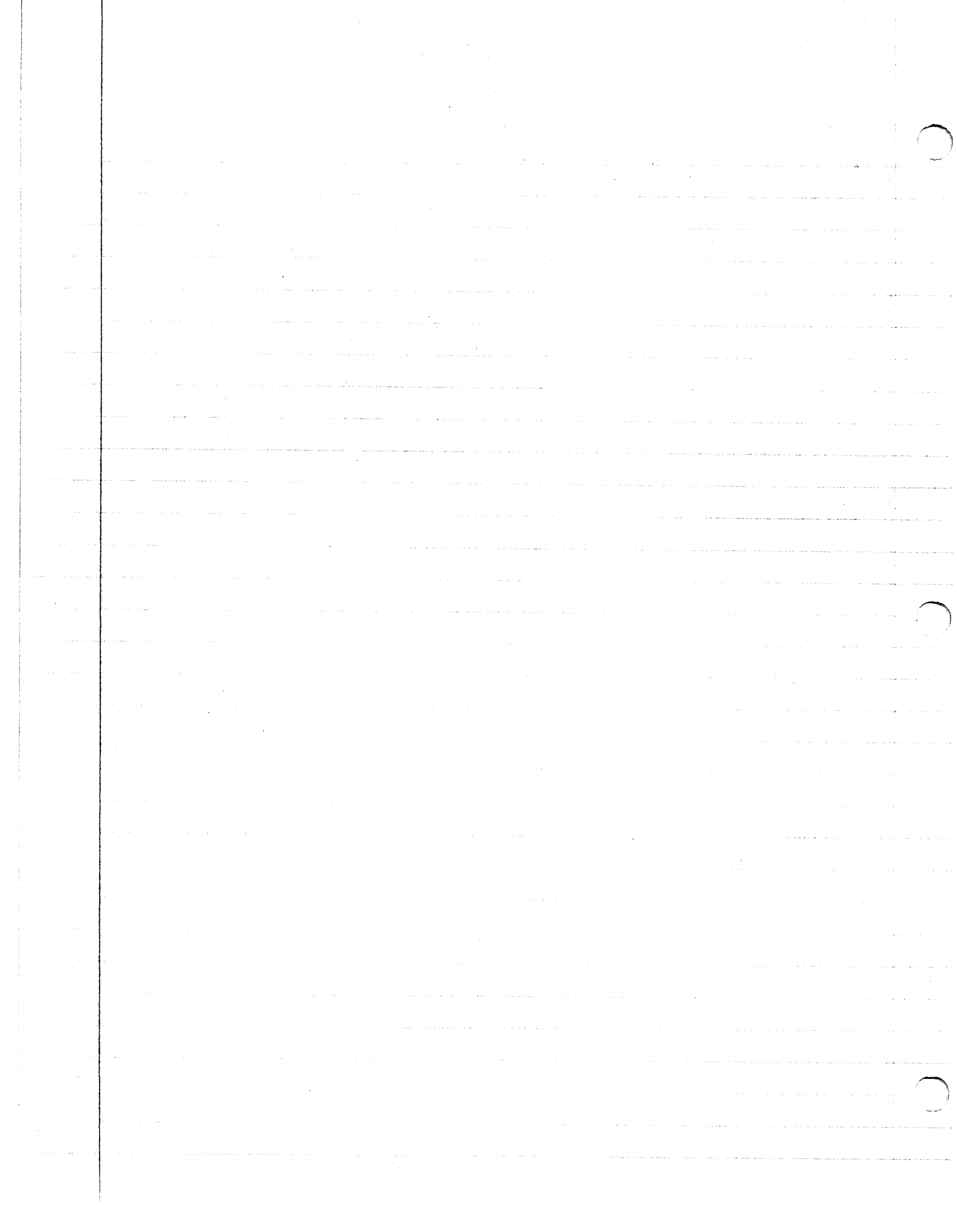
18 A 3, -2 y-intercept = 6
B $a(x-3)(x+2)$

61 A $v = 12 \text{ m/s}$ $f(t) = 12t - 4.9t^2$
 $-4.9t^2 + 12t - 5$

$$\frac{12 \pm \sqrt{12^2 - 4(-4.9)(-5)}}{2 \cdot (-4.9)}$$

$$\frac{12 \pm \sqrt{144 - 98}}{2 \cdot (-4.9)} = \frac{12 \pm 6.78}{-9.8} = \boxed{+1.02, -.53}$$

B NO SOLUTION



Strecken Becker

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18. a) $-2 \approx 3$

b) $y = a(x-2)(x+3)$

61. $f(t) = 12t - 4.9t^2$

$f(t) = -4.9t^2 + 12t + 5$

$x = \frac{-12 \pm \sqrt{12^2 - 4(-4.9)(5)}}{2(-4.9)}$

$\frac{-12 \pm \sqrt{144 + 98}}{-9.8}$

$\frac{-12 \pm \sqrt{242}}{-9.8}$

$\frac{-12 \pm \sqrt{144 + 98}}{-9.8}$

$\frac{-12 + 16}{-9.8} \quad \frac{4}{-9.8}$

$a(x-h)^2 + k$

$-4.9(x-5)^2 + .5$

6a. 180ft. by 240ft

$$\frac{240}{180} = \frac{4}{3}$$

a) $A(w) = w(w+60)$
 $= w^2 + 60w$

b) $w^2 + 60w$

b) $D = w^2 + 60w$

$$w^2 + 60w + 0 = -60w + \sqrt{60^2 - 4(1)(0)}$$

$$\frac{-60w \pm \sqrt{3600}}{2(1)}$$

$$= \frac{-60w \pm \sqrt{3600}}{2}$$

$$= -60 + 60$$

$$\frac{8P + 11P}{8P} = \frac{19P}{8P}$$

$$\frac{19P}{8P}$$

$$\frac{19}{8}$$

$$P = \frac{19}{8}P$$

College Algebra

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Lindy Pearson

18.) a) x-intercepts: $(-2, 0)$ & $(3, 0)$

b) $f(x) = -96(x+2)(x-3)$

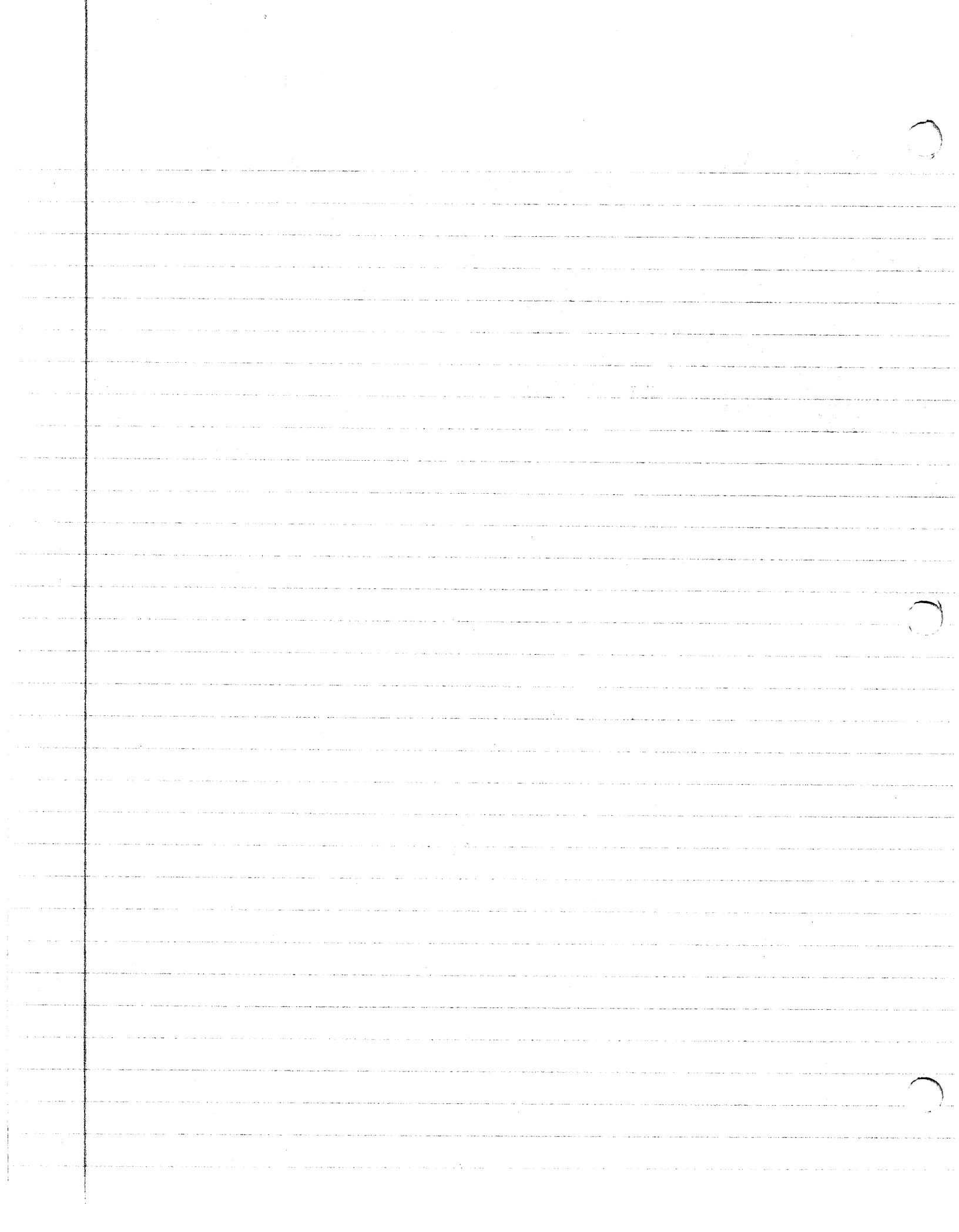
Standard Form: $a(x-h)^2 + k$

$$0 = a(3 - 1/2)^2 + 6$$

$$\underline{-6} = \underline{6.25}a \quad a = -0.96$$

$$6.25 \quad 6.25$$

61.)



Sarah Larkins
Stacy Beller
Raina Shoemaker

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#18) a) X-intercept = -2, 3

b) $f(x) = a(x-3)(x+2)$

#101) $f(t) = 12t - 4.9t^2$

$5 = 12t - 4.9t^2$
-5

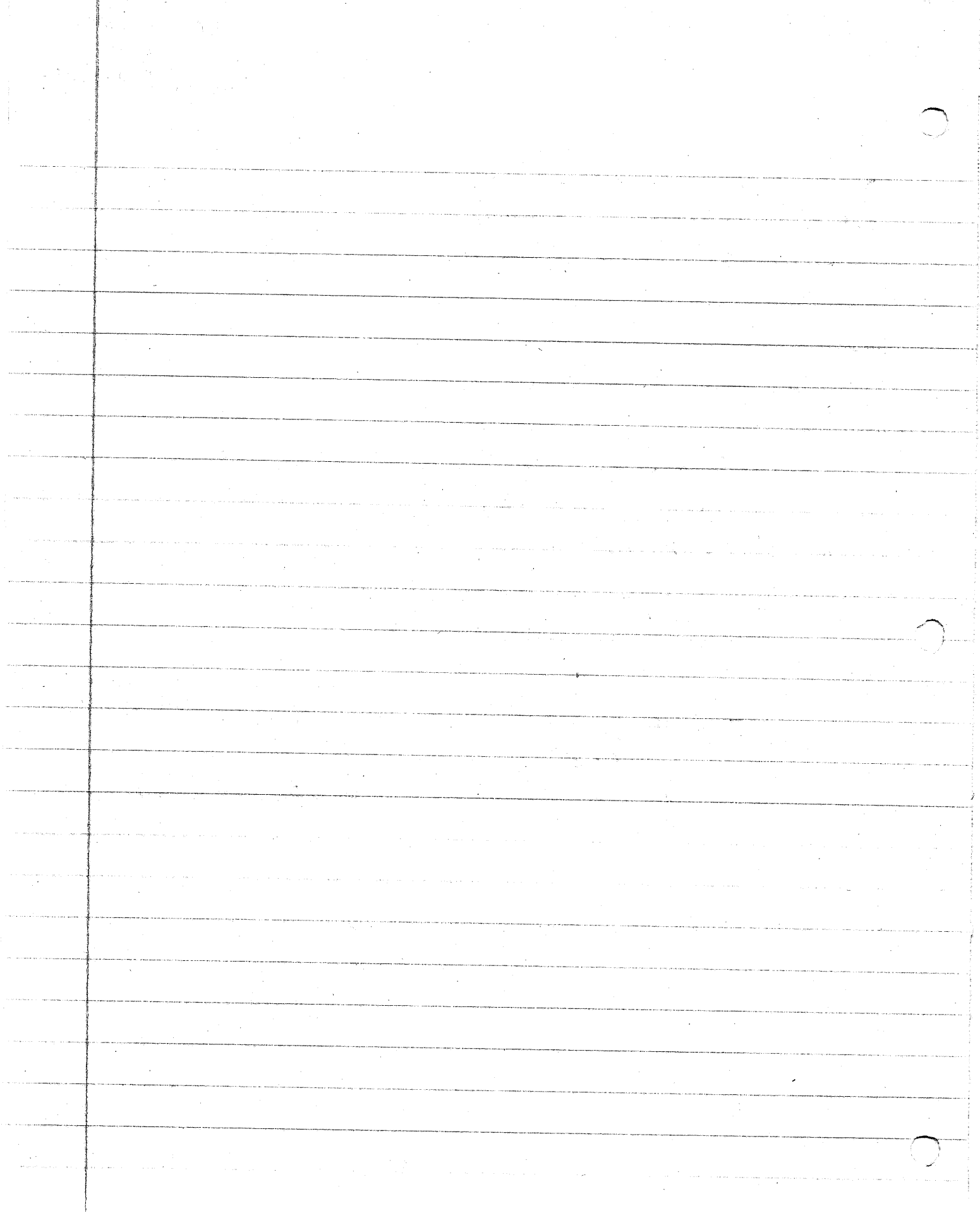
$0 = 12t - 4.9t^2 - 5$
 $= -4.9t^2 + 12t - 5$

$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

$= \frac{-(-12) \pm \sqrt{(-12)^2 - 4(-4.9)(-5)}}{2(-4.9)}$

$\frac{-12 + 0.782329983}{9.8} = 0.6920744881$

$\frac{-12 - 0.782329983}{9.8} = 0.5324153079$



Jerry Lunning, Mark Keese, Erik p. 459 # 18, 61, 64, 66, 67

18) a) $x = -2$

$$x = 3$$

b) $f(x) = a(x+2)(x-3)$

$$6 = a(0+2)(0-3)$$

$$6 = -6a$$

$$a = -1$$

$$f(x) = -1(x+2)(x-3)$$

6) a) $f(t) = -4.9t^2 + 12t$

$$5 = -4.9t^2 + 12t$$

$$0 = -4.9t^2 + 12t - 5$$

$$= \frac{-12 \pm \sqrt{12^2 - 4(-4.9)(-5)}}{2(-4.9)}$$

$$= \frac{-12 \pm \sqrt{12^2 - 98}}{-9.8}$$

$$= \frac{-12 \pm 6.28}{-9.8}$$

$$x = .53 \quad x = 1.92$$

b) It does not

c) $0 = -4.9t^2 + 12t$

$$0 = t(-4.9t + 12)$$

$$t = 0 \quad t = -4.9t + 12$$

$$t = \frac{12}{4.9}$$

$$x = 2.45 \text{ m}$$

