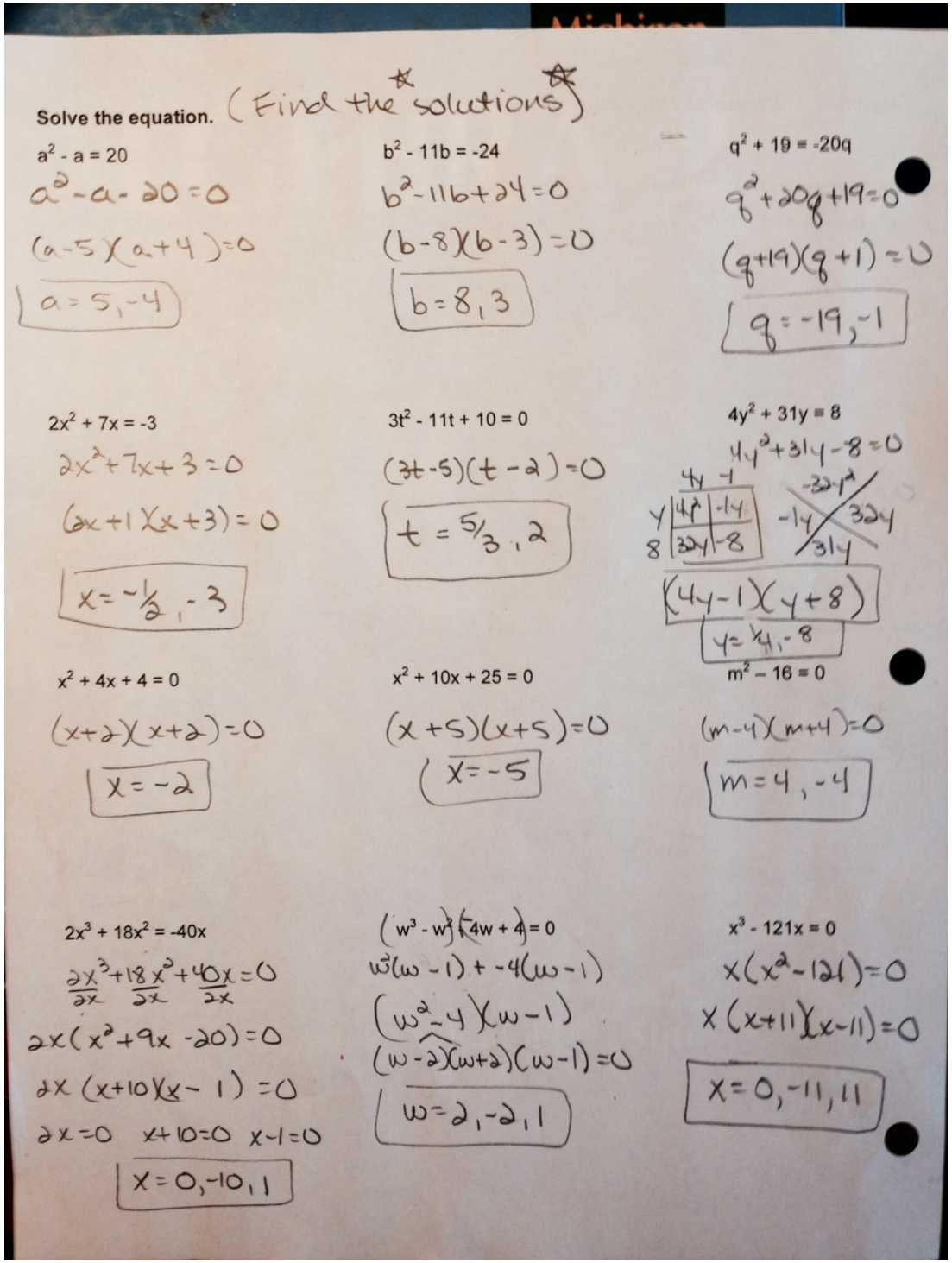

Solve the equation. (Find the solutions)

$a^2 - a = 20$

$a^2 - a - 20 = 0$

$(a-5)(a+4) = 0$

$a = 5, -4$

$b^2 - 11b = -24$

$b^2 - 11b + 24 = 0$

$(b-8)(b-3) = 0$

$b = 8, 3$

$q^2 + 19 = -20q$

$q^2 + 20q + 19 = 0$

$(q+19)(q+1) = 0$

$q = -19, -1$

$2x^2 + 7x = -3$

$2x^2 + 7x + 3 = 0$

$(2x+1)(x+3) = 0$

$x = -\frac{1}{2}, -3$

$3t^2 - 11t + 10 = 0$

$(3t-5)(t-2) = 0$

$t = \frac{5}{3}, 2$

$4y^2 + 31y = 8$

$4y^2 + 31y - 8 = 0$

	$4y$	-1
y	$4y^2$	$-1y$
8	$32y$	-8

$-32y^2$

$-1y \quad 32y$

$31y$

$(4y-1)(y+8)$

$y = \frac{1}{4}, -8$

$x^2 + 4x + 4 = 0$

$(x+2)(x+2) = 0$

$x = -2$

$x^2 + 10x + 25 = 0$

$(x+5)(x+5) = 0$

$x = -5$

$m^2 - 16 = 0$

$(m-4)(m+4) = 0$

$m = 4, -4$

$2x^3 + 18x^2 = -40x$

$\frac{2x^3}{2x} + \frac{18x^2}{2x} + \frac{40x}{2x} = 0$

$2x(x^2 + 9x - 20) = 0$

$2x(x+10)(x-1) = 0$

$2x = 0 \quad x+10 = 0 \quad x-1 = 0$

$x = 0, -10, 1$

$w^3 - w^2 + 4w + 4 = 0$

$w^3(w-1) + -4(w-1)$

$(w^2 - 4)(w-1)$

$(w-2)(w+2)(w-1) = 0$

$w = 2, -2, 1$

$x^3 - 121x = 0$

$x(x^2 - 121) = 0$

$x(x+11)(x-11) = 0$

$x = 0, -11, 11$