Solving Mixed Algebraic Equations

Name: _____ Score: _____

Solve for each variable.

$y + 22 = 32$	$2v + 3 = 23$	$4r^2 + 10 = 26$
$2c^2 + 20 = 38$	$r^2 + 24 = 40$	$n - 30 = -20$
$t - 25 = 5$	$4q^1 + 5 = 25$	$-5a = 15$
$4b + 10b = 140$	$y^2 - 14 = 2$	$f - 32 = 10$
$3c - 2 = 19$	$x^2(5 - 2) = 12$	$-d + 32 = 12$
$4z^1 + 26 = 50$	$-2u + 10 = -14$	$3k = -21$
$3x^2(1 + 9) = 270$	$v - 17 = 12$	$x^0(15 - 2x) = 5$

Answers

Solve for each variable.

$y + 22 = 32$

$y = 10$

$2v + 3 = 23$

$v = 10$

$4r^2 + 10 = 26$

$r = 2$

$2c^2 + 20 = 38$

$c = 3$

$r^2 + 24 = 40$

$r = 4$

$n - 30 = -20$

$n = 10$

$t - 25 = 5$

$t = 30$

$4q^1 + 5 = 25$

$q = 5$

$-5a = 15$

$a = -3$

$4b + 10b = 140$

$b = 10$

$y^2 - 14 = 2$

$y = 4$

$f - 32 = 10$

$f = 42$

$3c - 2 = 19$

$c = 7$

$x^2(5 - 2) = 12$

$x = 2$

$-d + 32 = 12$

$d = 20$

$4z^1 + 26 = 50$

$z = 6$

$-2u + 10 = -14$

$u = 12$

$3k = -21$

$k = -7$

$3x^2(1 + 9) = 270$

$x = 3$

$v - 17 = 12$

$v = 29$

$x^0(15 - 2x) = 5$

$x = 5$