Back Substitution

The new system produced by G-E is easier to solve than the original. We solve it by

Back Substitution: Solve the last equation for w, then substitute w back and solve equation 2 for v, then substitute w and v back and solve equation 1 for u

$$w = 2$$
$$-8v - 2(2) = -12 \implies v = 1$$
$$2u + (1) + (2) = 5 \implies u = 1$$