## Worksheet ---- Polynomial Equations & Applications

1. Solve.

(a) 
$$2x^2 + 21 = -17x$$

(b) 
$$x^3 - 2x^2 = 63x$$

(c) 
$$(z + 4)(z - 2) = -5$$

(d) 
$$2k(k + 3) = (3k + 1)(k + 3)$$

(e) 
$$x^3 + 3x^2 - 4x - 12 = 0$$

(c) How many seconds does it take for the flare to hit the ground?