1. Solve:

   a.
   $$x - 7y = -11$$
   $$5x + 2y = -18$$
   $$x + y + z = 3$$

   b.
   $$x + 2y - 3z = 50$$
   $$2x + y + 2z = 3$$
   $$2x - 5y + 4z = -79$$

c. Wearing night vision goggles at the zoo's night animal exhibit, Nate, Alec, and Seth saw opossums, owls, and snakes. Nate noticed that there were twice as many opossums as snakes. Alec counted a total of 64 legs on the creatures. Seth counted 27 animals. The boys saw at least one of each type of animal. How many of each type were in the exhibit?

d.

$$x + y - z = -1$$
$$2x - 2y + 3z = 8$$
$$2x - y + 2z = 9$$

e.

$$x + 3z = -5$$
$$5x - 2y = -22$$
$$5y - 6z = 36$$

f. Carly is training for a triathlon. In her training routine each week, she runs 7 times as far as she swims, and she bikes 3 times as far as she runs. One week she trained a total of 232 miles. How far did she run that week?