**Animals on the Farm**

X = number of chickens

Y = number of sheep

2x + 4y = 270

x + y = 68

[x = 68 – y]

2(68 – y) + 4y = 270

136 + 2y = 270

2y = 134

y = 67

x = 1

2x + 4y = 270

x + y = 75

[x = 75 – y]

2(75 – y) + 4y = 270

150 + 2y = 270

2y = 120

y = 60

x = 15

a = num of legs

b = animals

a = 4y + 2x

b = x + y

[x = b – y]

a = 4y + 2(b-y)

a = 2y + 2b

y = (a – 2b) / 2

Pseudocode:

1. Receive number of legs and animals on the fram
2. Use the formula above to find a
3. The number of chicken equals the number of animals minus the number of sheep
4. Display the results