

## MOSQUITO MATH PROBLEMS

Several concepts included in the lessons regarding mosquito life history can be adapted to math and logic problems. Listed below are several examples of math word problems related to the mosquito lessons.

### **Problem 1:**

A female mosquito lives for 150 days and lays a raft of 250 eggs every 15 days.

How many eggs will she lay in her lifetime? (2500, 10 egg rafts)

### **Problem 2:**

A female mosquito lays 1200 eggs in her lifetime. She lays 300 eggs in her first egg batch.

What percent of her total eggs are laid in the first egg batch? (25%)

### **Problem 3:**

A mosquito lays 150 eggs in a raft. All of the eggs hatch, but 32% of the larvae are eaten by fish. The rest survive to become adults.

How many of the larvae are eaten by fish? (48)

How many of the larvae survive to become adults? (102)

### **Problem 4:**

A mosquito lays 200 eggs in a raft. Ninety percent (90%) of the eggs hatch. Of the larvae that hatch, 50% are eaten by aquatic predators; the rest survive to become adults. Of the adults that emerge, 20% are eaten by dragonflies and spiders on the way to taking their first flower nectar meal.

How many make it to the flower to take a meal? ( $200 \text{ eggs} \times 0.9 = 180 \text{ hatch}$   $\times 0.5 = 90$  survive to become adults  $\times 0.8 = 72$  make it to the flower)

### **Problem 5:**

Two mosquitoes fly off together in search of flower nectar. The first mosquito flies 3 miles and finds a flower in a garden. The second mosquito flies 2.5 times that far, and finally finds a clover field.

How far did the second mosquito fly? ( $3 \text{ miles} \times 2.5 = 7.5 \text{ miles}$ )