

### Answer on Question #52644 – Math - Algebra

Suppose that a butterfly can fly 82 feet in 4 seconds, a dragonfly can fly 50 feet in 2 seconds. Which can fly faster and by how much?

#### Solution

$$S_1 = 82 \text{ ft}, t_1 = 4 \text{ s}, S_2 = 50 \text{ ft}, t_2 = 2 \text{ s}.$$

Using formula  $V = \frac{S}{t}$ , we have that the speed of butterfly's movement is

$$V_1 = \frac{S_1}{t_1} = \frac{82}{4} = 20.5 \text{ ft/s}; \text{ the speed of dragonfly's movement is } V_2 = \frac{S_2}{t_2} = \frac{50}{2} = 25 \text{ ft/s}.$$

So,  $V_1 = 20.5 < 25 = V_2$  and dragonfly can fly faster by  $25 - 20.5 = 4.5 \text{ ft/s}$ .

**Answer:** dragonfly can fly faster by 4,5 ft/s.