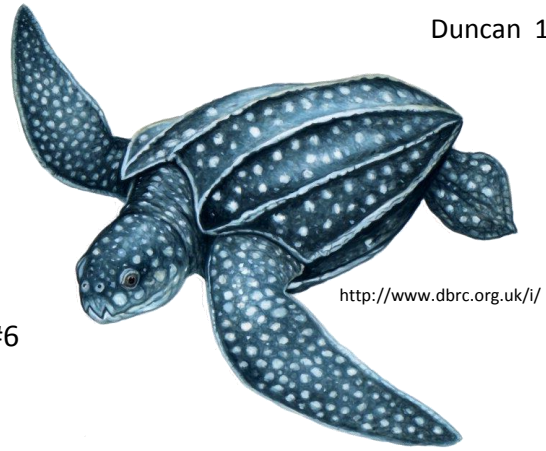


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Community Problem #6  
 Elementary Algebra

Many people don't think of Sea Turtles as part of Alaska's natural marine ecosystem but they are according to the State of Alaska's Fish and Game Department. Sea Turtles are occasional visitors to Alaskan waters. Use the information below to determine the number of reported sightings for the four listed species. (Information taken from: <http://www.adfg.alaska.gov/static/education/wns/turtles.pdf>)

**Number of Sighting Reported in Alaska (between 1960 and 2007)**

**Leatherback Sea Turtles sightings = L**

**Green Sea Turtles sightings = G**

**Olive Ridley Sea Turtles sightings = R**

**Loggerhead Sea Turtles sightings = H**

$$L + G + R + H = 39$$

$$H + R = 5$$

$$H + G = 17$$

$$H + L = 19$$

$$G + L = 34$$

$$H + L + G = 36$$

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sample of work:

we know  $H + L + G = 36$  and  $G + L = 34$

so  $H + 34 = 36$

which means  $H = 2$

we know  $H + R = 5$

plug in 2 for H

$$2 + R = 5$$

so  $R = 3$

we know  $H + G = 17$

plug in 2 for H

$$2 + G = 17$$

$G = 15$

We know  $G + L = 34$

plug in  $G=15$

$$15 + L = 34$$

$L = 19$

Leatherback Sea Turtles sightings = 19

Green Sea Turtles sightings = 15

Olive Ridley Sea Turtles sightings = 3

Loggerhead Sea Turtles sightings = 2