

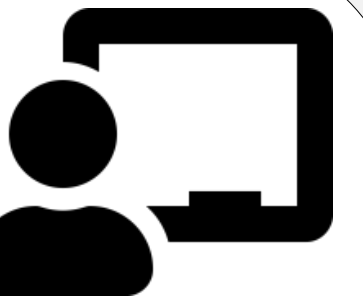
# Word Problem for **length** using **Subtraction** - **Customary units**





**Example : 1**

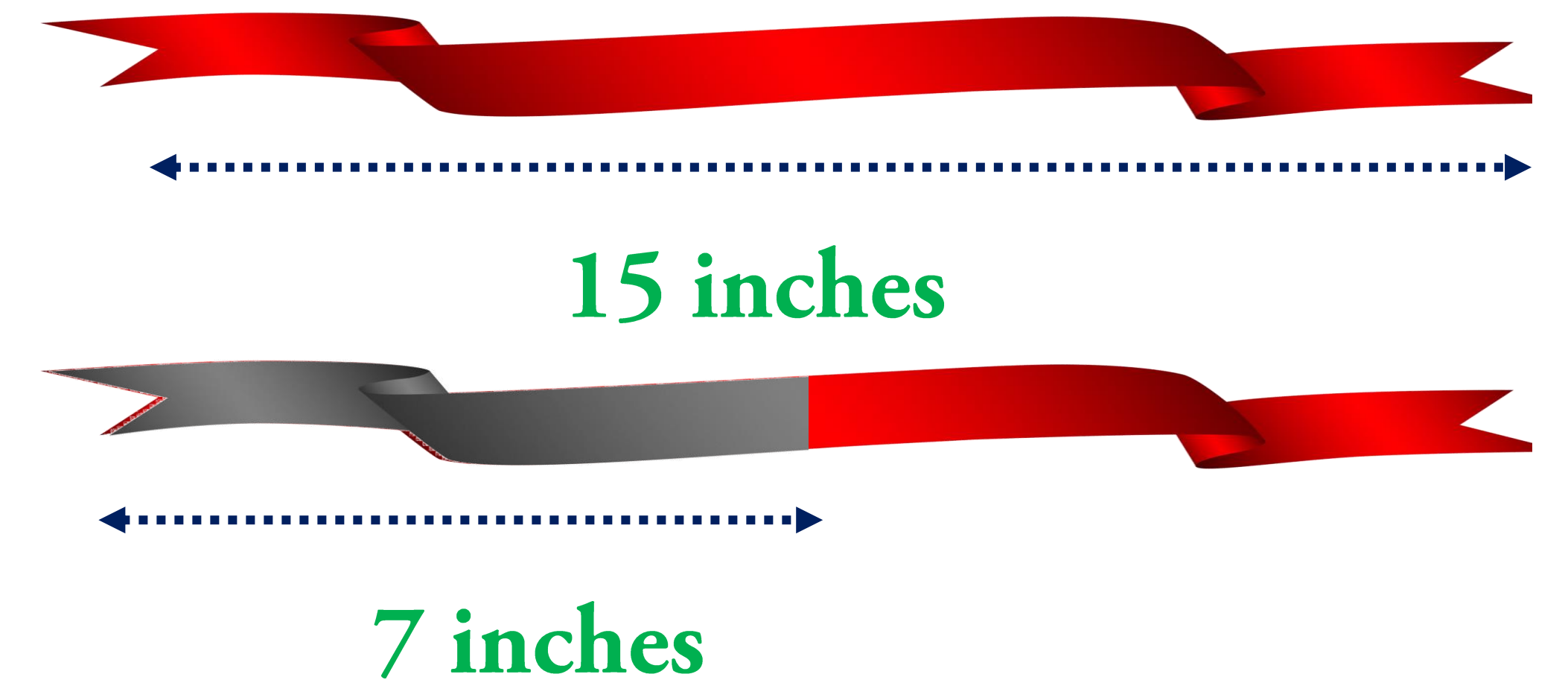
Kaviya has a piece of ribbon that is 15 inches long. She cuts off a piece that is 7 inches long. How long is the ribbon now?



**Solution:**

Initial length of the ribbon = 15 inches

Cut off length of the ribbon = 7 inches



$$\begin{aligned} \text{Difference} &= \text{Initial length of the ribbon} - \text{Cut off length of the ribbon} \\ &= 15 \text{ inches} - 7 \text{ inches} \\ &= 8 \text{ inches} \end{aligned}$$

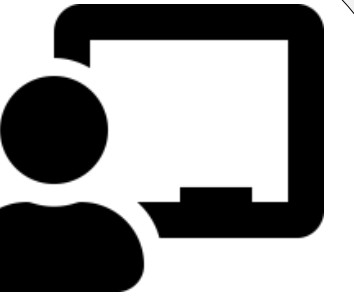
The piece of ribbon is now 8 inches long.





Example : 2

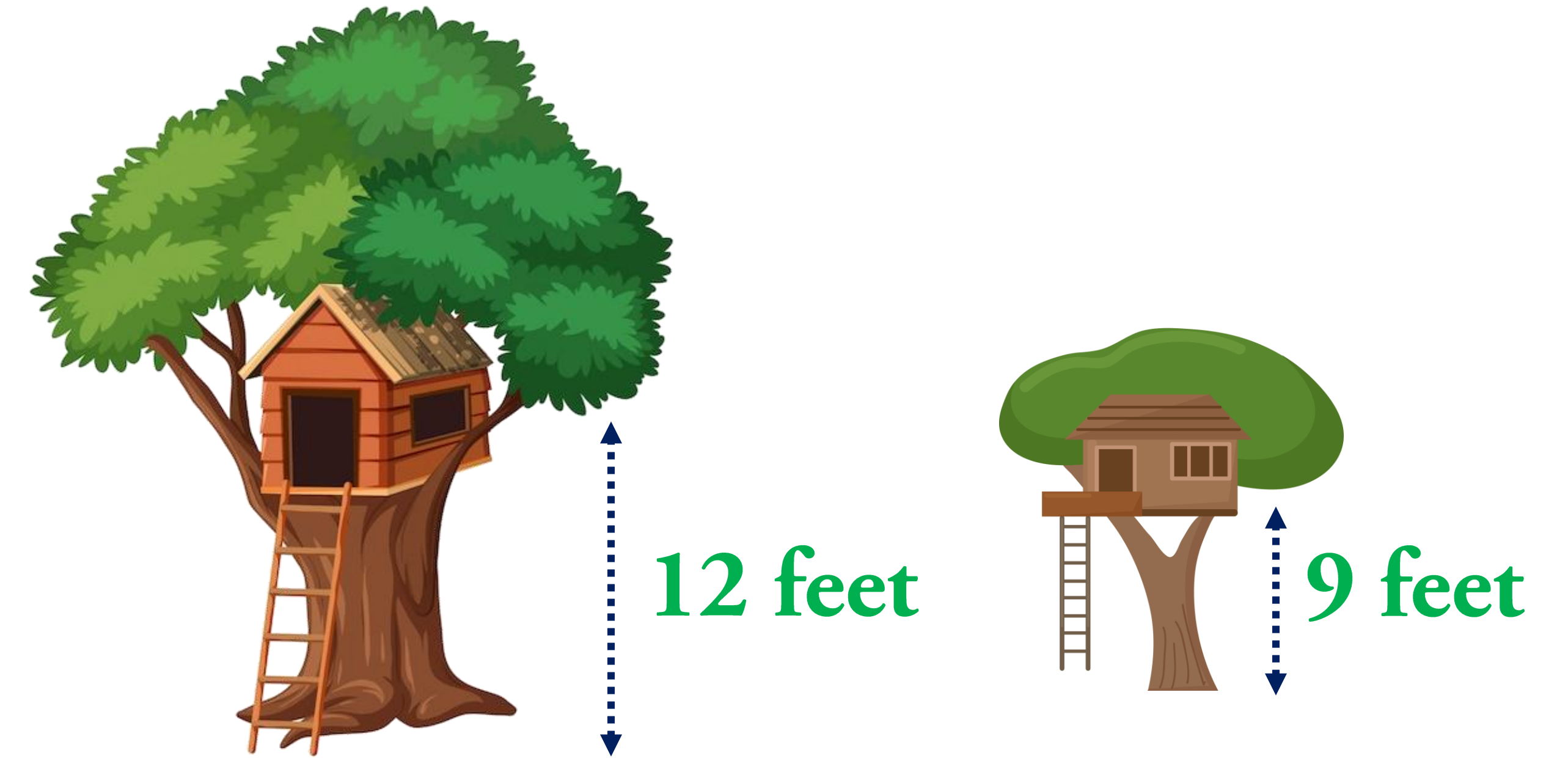
John's treehouse is 12 feet above the ground. His friend's treehouse is 9 feet above the ground. How much higher is John's treehouse than his friend's treehouse?



**Solution:**

John's treehouse height = 12 feet

John friend's treehouse height = 9 feet



$$\begin{aligned} \text{Difference} &= \text{John's treehouse height} - \text{John friend's treehouse height} \\ &= 12 \text{ feet} - 9 \text{ feet} \\ &= 3 \text{ feet} \end{aligned}$$

John's treehouse is **3 feet** higher than his friend's treehouse.





**Example : 3**

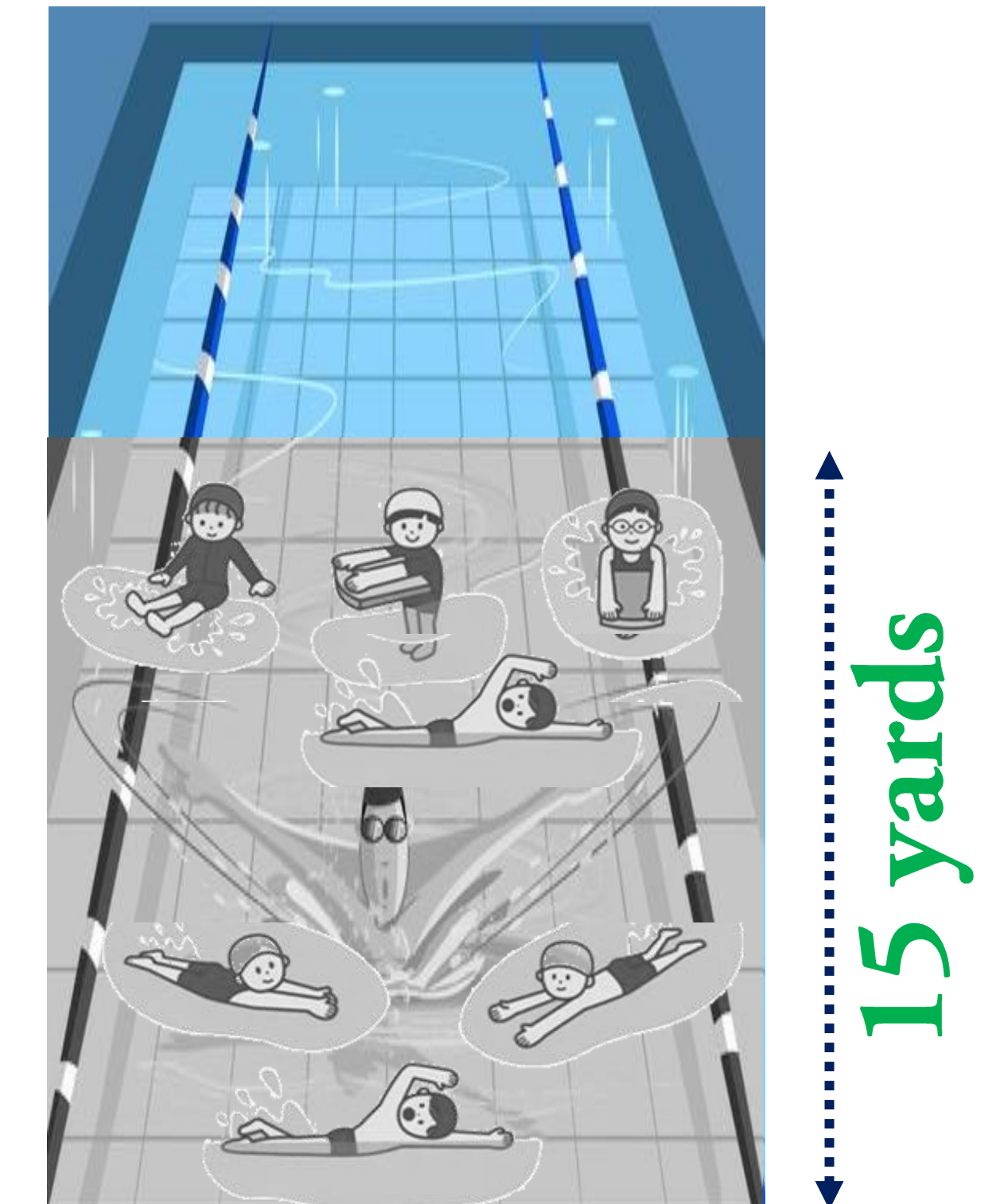
A swimming pool is 25 yards long. If 15 yards are already occupied by swimmers, how much space is left in the pool?



**Solution:**

**Total pool length = 25 yards**

**Space occupied by the swimmers = 15 yards**



$$\begin{aligned} \text{Remaining space} &= \text{Total pool length} - \text{Occupied space} \\ &= 25 \text{ yards} - 15 \text{ yards} \\ &= 10 \text{ yards} \end{aligned}$$

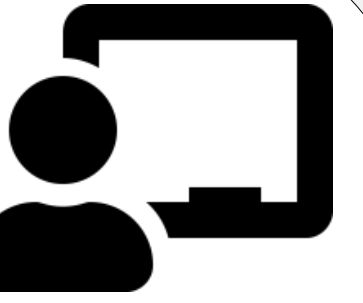
**10 yards** of space are left in the pool.





Example : 4

The Johnson family is driving to visit their grandparents, who live 50 miles away.



They have already driven 38 miles. How many miles are left in their trip?

**Solution:**

Total distance = 50 miles

Distance already driven = 38 miles

Remaining distance = Total distance - Distance covered

= 50 miles - 38 miles

= 12 miles



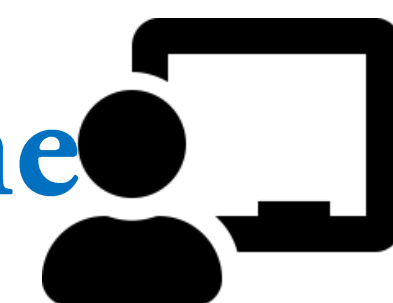
The Johnson family has **12 miles** left in their trip.





Example : 5

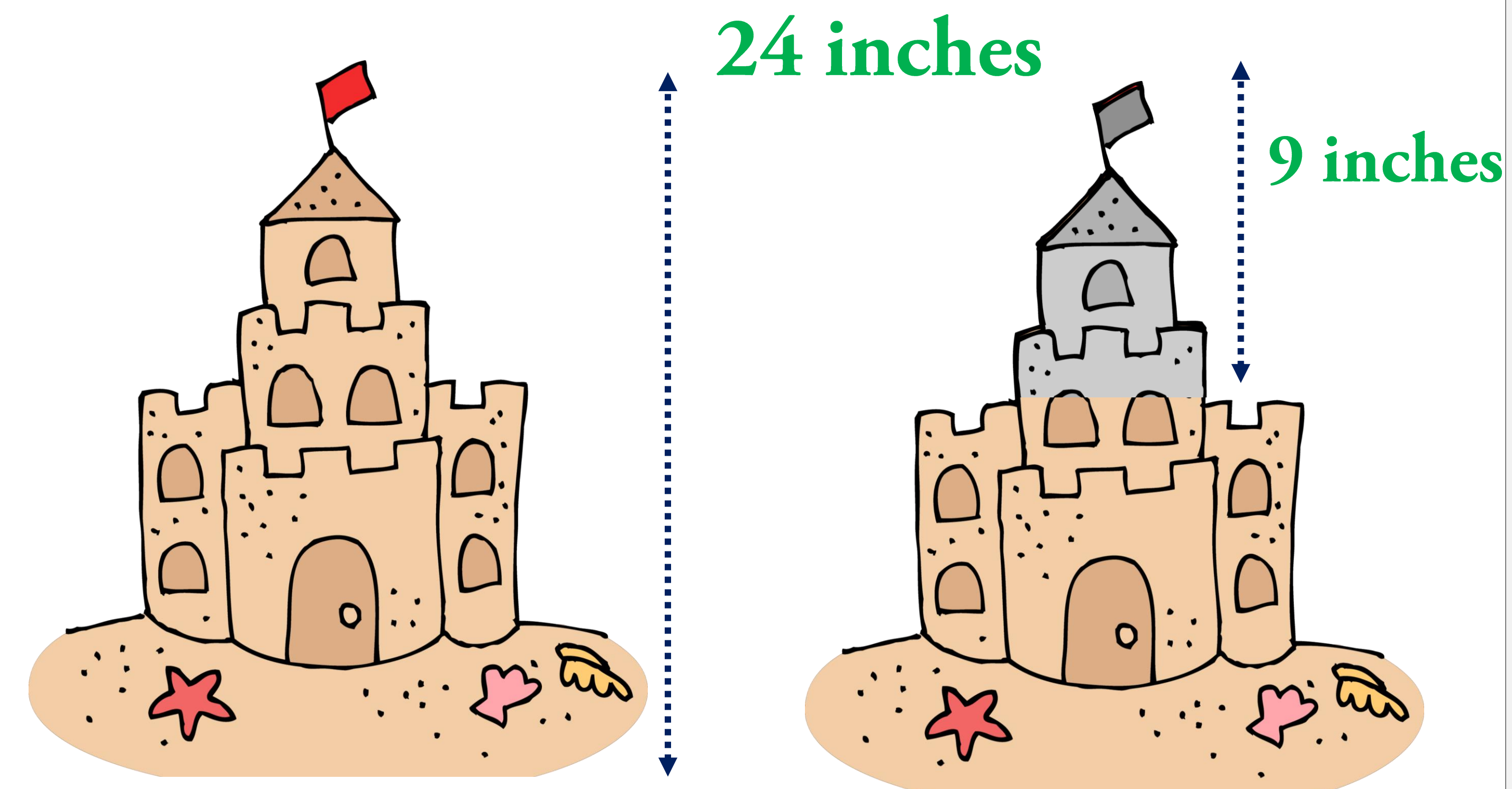
Ben built a sandcastle that was 24 inches tall. The waves knocked off 9 inches of the sandcastle. How tall is the sandcastle now?



**Solution:**

Initial height of sandcastle = 24 inches

Amount knocked off sandcastle = 9 inches



$$\begin{aligned} \text{Remaining height} &= \text{Initial height of sandcastle} - \text{Amount knocked off sandcastle} \\ &= 24 \text{ inches} - 9 \text{ inches} \\ &= 15 \text{ inches} \end{aligned}$$

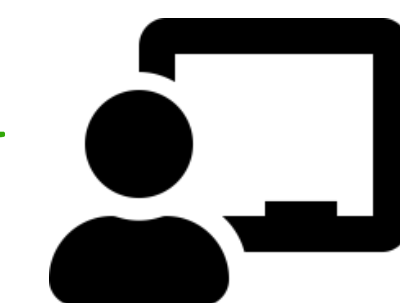
The sandcastle is now 15 inches tall.





Example : 6

The zoo is 18 miles from Ben's house. He has already travelled 9 miles. How many more miles does he have to travel to get to the zoo?



Solution:

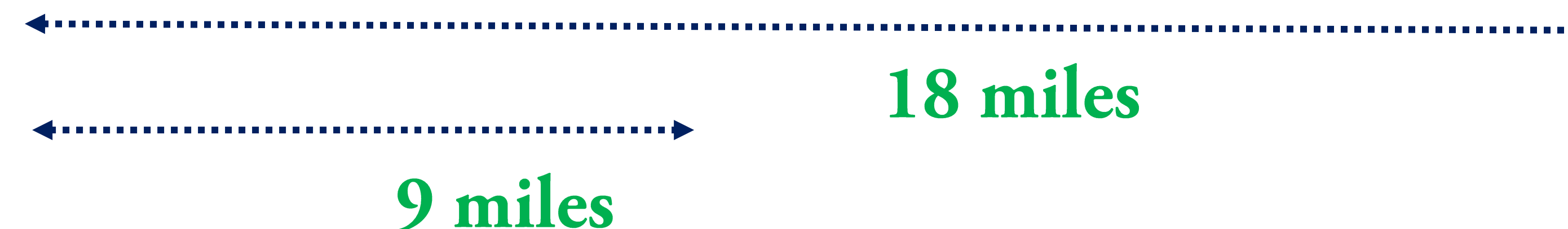
Total distance = 18 miles

Distance already travelled = 9 miles

Remaining distance = Total distance - Distance already travelled

= 18 miles - 9 miles

= 9 miles



Ben has to travel 9 miles to get to the zoo.

