

After watching the *Difficult Addition Facts* video, make sense of the mathematics by taking a closer look at the problem situations and solutions. Use the comments and questions in bold to help you solve the problems and develop efficient thinking strategies for the most difficult addition facts.

The purpose of this video is to help you use the facts you know to find answers to the difficult addition facts. One strategy is to use doubles, like  $5 + 5 = 10$  or  $30 + 30 = 60$ . A second strategy is to use tens, numbers that add to ten or a multiple of ten, like  $8 + 2$  or  $29 + 1$ . Both strategies can help you quickly find answers to the basic facts and problems involving larger numbers.

**Problem 1:** Dave is practicing for a golf tournament, but he's having trouble keeping score. It took him eight shots to get to the green, and then six putts to sink the ball in the hole. What is the total number of shots?

**What addition problem do you need to solve to find the total number of shots?**

$$8 + 6 = ?$$

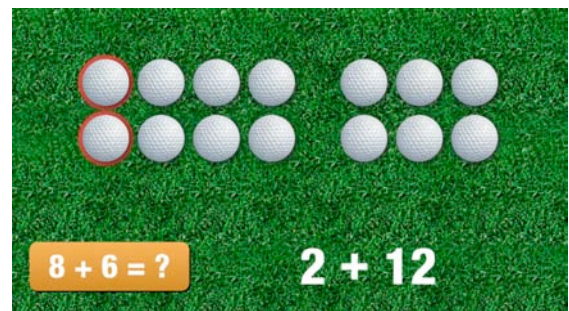
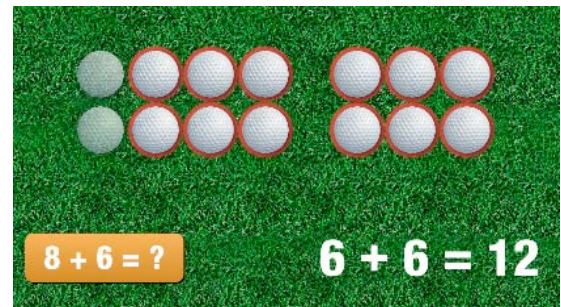
**Strategy 1: Use doubles**

**How can you use doubles to solve this problem?**

**Possible Thinking:** I know that  $6 + 6 = 12$ . Eight is two more than 6, so  $8 + 6$  will be two more than  $6 + 6$ .

The remaining 2 plus 12 equals 14.

$$8 + 6 = 14$$

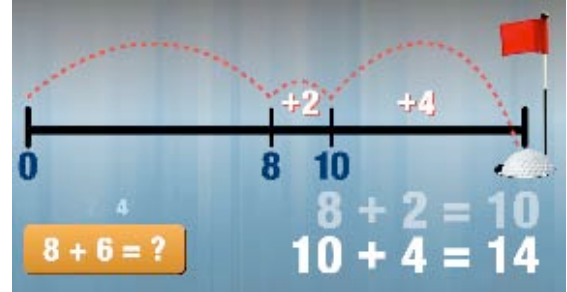


### Strategy 2: Use tens

How can you use 10 to solve this problem?

**Possible Thinking:** I know that  $8 + 2$  equals 10. 6 minus 2 is 4, so I have 4 more to add.

$$10 + 4 = 14$$



**Problem 2:** On the last two holes, Dave took 29 and 25 shots. How many total shots is that?

What addition problem do you need to solve to find the total number of shots?

$$29 + 25 = ?$$

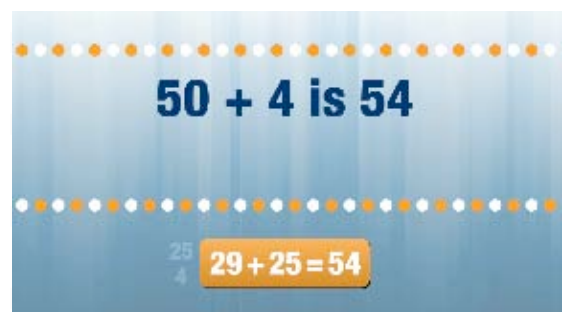
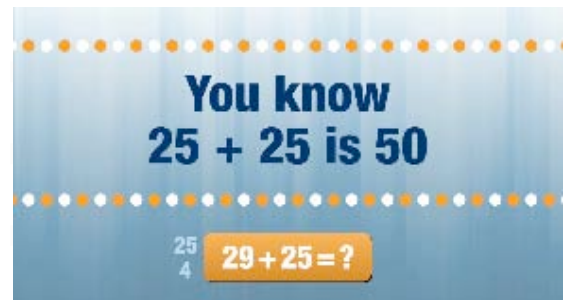
### Strategy 1: Use doubles

How can you use doubles to solve this problem?

**Possible Thinking:** I know that  $25 + 25 = 50$ . 29 is 4 more than 25, so  $29 + 25$  is 4 more than  $25 + 25$ , or 4 more than 50.

50 plus 4 more is 54.

$$29 + 25 = 54$$



### Strategy 2: Use tens

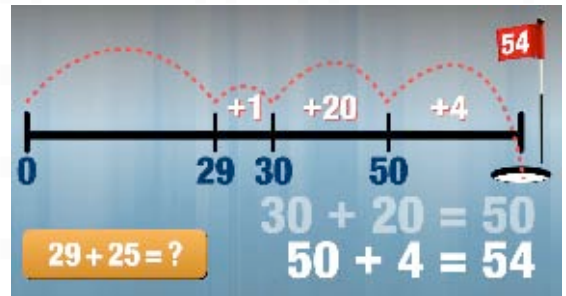
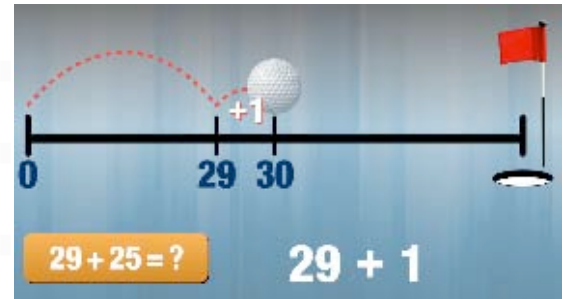
How can you use 10 to solve this problem?

**Possible Thinking:** I know that  $29 + 1$  equals 30. This leaves 24 more to add.

Next add **20** to 30 to get 50. I still have 4 more to add. Finally, add **4** to 50 to get 54.

$$29 + 25 = 54$$

Notice that I added 1 first, then 20, and finally 4.  
 $1 + 20 + 4 = 25$ . 25 is the number I was adding to 29.



Use the math facts you know, doubles and tens, to calculate the answers to more difficult problems. These strategies are accurate and efficient. You can even use doubles and tens to mentally calculate answers to problems with larger numbers.