

Problem-Solving Strategy: Guess and Check

To solve some problems, you can make a reasonable guess and then check it in the problem. You can then use the results to improve your guess until you find the solution. This strategy is called **guess and check**.

Example

The product of two consecutive even integers is 1088. What are the integers?

The product is close to 1000.

Make a guess. Let's try 24 and 26. \longrightarrow $24 \times 26 = 624$

This product is too low.

Adjust the guess upward.

Try 30 and 32. \longrightarrow $30 \times 32 = 960$

This product is still too low.

Adjust the guess upward again.

Try 34 and 36. \longrightarrow $34 \times 36 = 1224$

This product is too high.

Try between 30 and 34.

Try 32 and 34. \longrightarrow $32 \times 34 = 1088$

This is the correct product.

The integers are 32 and 34.