

## The <br> American Exhibit

What's going on? The
short answer


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This machine calculates square roots. A square root is number you multiply by itself to get another number 4 is the square ball that started on \#16 landed on \#4. 4 is the square root of 16 , because 4 times 4 equals 16 .

- Test the machine:

Choose a number to launch the ball from. What number did the ball land on? Is it the square root?
You can use the calculator to check.
(Press $\sqrt{ }$ to get the square root.)

How does this work?
The short answer:
When a ball leaves the ramp, its speed, and thus the
distance it travels, distance it travels, depends on the square root of the
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(For the long answer, lo

The short answer: When a ball leaves the ramp, its speed, and thus the distance it travels, depends on the square root of the height you start it from.

