## Kicking a Ball

Did You Know? A soccer player's foot contains energy. When the foot hits the ball, the energy is released. The ball is in motion and it is headed to a new position.

The speed the ball moves depends on the amount of force the player uses to kick the ball. How far the ball travels depends on how forceful or gentle the kick is.


Lucas kicked a golf ball, a baseball, and a soccer ball. He kicked each ball 3 times. The distance the ball traveled after each kick is shown in the table below.

|  | Kick 1 | Kick 2 | Kick 3 |
| :--- | :---: | :---: | :---: |
| golf ball | 5 yards | 5 yards | 5 yards |
| baseball | 9 yards | 9 yards | 9 yards |
| soccer ball | 10 yards | 10 yards | 10 yards |

(1) Draw a bar diagram to represent the total distance that the soccer ball was kicked.
(2) Draw a number line to represent the total distance that the soccer ball was kicked.
(3) What is the total distance that the soccer ball was kicked?
(4) Extension How many more yards did Lucas kick the soccer ball than the baseball? Show your work.

