

# BACCALAURÉAT-Session 2017

## Epreuve de Discipline Non Linguistique

### Mathématiques/Anglais

#### *Topic: Calculations*

#### **Why We Race for Charity**

Americans are addicted to racing for a cause. It started in 1970, when approximately 1,000 people participated in the March of Dimes' WalkAmerica, raising \$75,000 for perinatal health issues. By 2006, runners and walkers were raising more than \$700 million annually for charities. In 2013, that number had grown to \$1.2 billion, spread over 43,000 events and 9.6 million fundraising participants.

Why do we spend so much time raising money to compete in charity events? The answer lies in one of sport's greatest paradoxes: running for others is one of the most self-serving things an athlete can do.

“Purpose explains the popularity of running for a cause and its powerful effect on an athlete's motivation. It's something bigger than “I want to quit smoking” or “I want to sleep better.” It provides a North Star to shoot for, and when people have [a purpose], they demonstrate better focus and motivation,” says Dr. Vic Strecher, a world-renowned behavioral scientist at the University of Michigan. .

*By Bradley Stulberg Dec 4, 2014 [www.outsideonline.com](http://www.outsideonline.com)*

#### **Questions**

1. What do you learn, from this text, about racing for Charity?
2. To raise money for charity, Alice, Brian and Chris were sponsored \$1 for each kilometer they ran over a 10-day period. They received sponsorship proportionally for partial kilometers completed.
  - Alice ran 3km every day.
  - Brian ran 2km on day 1 and on each subsequent day ran 500 meters further than the day before.
  - Chris ran 2km on day 1 and on each subsequent day, he ran 20% further than the previous day.
    - a) How many kilometers did Alice run over the 10 days?
    - b) How far did Brian run on day 5? How many kilometers did he run during the ten days?
    - c) Show that day 10 is the first day that Chris runs further than 10km.
    - d) Find the total amount raised by the end of the 10 days, to the nearest cent.
3. What do you think of races as a way of collecting money for charity?