

THEME : Functions

Please do not write on the subject paper and don't forget to give back the examination paper at the end of the test.

As Bob was out hiking in the hills of North Dakota, he fell down an abrupt hill. When he has reached the bottom, he realised he had broken his leg and there was no way he could make it back home by himself. Being an experienced hiker, he had brought his flare gun in case this would have happened.

He knows that the flare must be **above 200 feet** in the air so that someone can see it.

The formula $-16t^2 + 130t + 1$, where t is the time in seconds, represents the height in feet of the flare.

How long will the flare be in the air at 200 feet or higher ?

Tip : Think that you have to solve an inequation...

Vocabulary :

to hike = randonner

flare = fusée de détresse