## Option One: Would you Rather a bedroom with:

A) a length of $\mathbf{2 0}$ and perimeter of 58

Or
B) a length of 14 and a perimeter of 56 ?

20 ft

A) We know two of the lengths: $20 \mathrm{ft}+20 \mathrm{ft}=40 \mathrm{ft}$

We know the perimeter: $58 \mathrm{ft} . \quad 58 \mathrm{ft}-40 \mathrm{ft}=18 \mathrm{ft}$ So divide that by the 2 (end widths): $18 \mathrm{ft} \div 2 \mathrm{ft}=9 \mathrm{ft}$ So, our bedroom is 20 feet long and 9 feet wide. Find the area: $L \times W=20 \times 9=180$ square ft .
B) We know that the two lengths of this room are 14 ft : $14 \mathrm{ft}+14 \mathrm{ft}=28 \mathrm{ft}$

We know the perimeter is 56 ft . $56 \mathrm{ft}-28 \mathrm{ft}=28 \mathrm{ft}$. Divide the 28 ft by 2 and you have 14 ft .
So, this bedroom is a 14 ft , by 14 ft square. Find the area: $\mathrm{L} \times \mathrm{W}=14 \times 14=194$ square ft .

| 14 ft |  |
| ---: | ---: |
| 14 ft |  |
| 14 ft |  |

Justify why one would be more desirable for YOU. Why would you pick one over the other? It could be shape and organization of your belongings, or it could have to do with the greater floor space in the room. Maybe you share a room and a long room works better to split in half...

## Option Two: Would you Rather have a dollar for every foot in a mile, or for every day you have been

alive?
We know that 1 mile $=5280 \mathrm{ft}$ (you will need to have researched how many feet per mile)
If you use the link provided in the question and enter your birthday, you can easily find the number of days that you have been alive (http://www.beatcanvas.com/daysalive.asp). Is this number greater than or less than the $\$ 5280$ you could earn for $\$ 1 \times 5280=\$ 5280$ ?

For example: March 15, 2008 you would be 4429 days old. So the $\$$ per foot is a better deal at $\$ 5280$.
When is it a better deal to take the dollar per day of living? You need to be born before 11/07/2005 (give or take a day or two, solution was calculated on April $27^{\text {th }} 2020$ ) - so you will get there when you are about 14 and a half!

