

**CPI Consumer Price Index****Numeric Response**

1. The consumer price index, CPI, is a comparison of the cost for products that provide basic needs from a time in the past to the current.

$$CPI = \frac{\text{Current\_Cost}}{\text{Cost\_in\_Past}} \times 100$$

Item	Current Cost in 2013	Cost in 2001
New home		\$154,373
Week of groceries		62
Compact car		13,033
Basic outfit		172

Set the Way-Back time machine to have a current year of 2013. The CPI for the above prices from 2001 to the 2013 was 128.1. What was the cost of a compact car in 2013? Express your answer as a dollar amount to the nearest dollar.

2. The consumer price index, CPI, is a comparison of the cost for products that provide basic needs from a time in the past to the current.

$$CPI = \frac{\text{Current\_Cost}}{\text{Cost\_in\_Past}} \times 100$$

Item	Current Cost in 2010	Cost in 2003
New home		\$142,408
Week of groceries		64
Compact car		13,100
Basic outfit		173

Set the Way-Back time machine to have a current year of 2010. The CPI for the above prices from 2003 to the 2010 was 116.8. What was the cost of a compact car in 2010? Express your answer as a dollar amount to the nearest dollar.

3. The consumer price index, CPI, is a comparison of the cost for products that provide basic needs from a time in the past to the current.

$$CPI = \frac{\text{Current\_Cost}}{\text{Cost\_in\_Past}} \times 100$$

Item	Current Cost in 2015	Cost in 2007
New home		\$184,549
Week of groceries		70
Compact car		14,073
Basic outfit		207

Set the Way-Back time machine to have a current year of 2015. The CPI for the above prices from 2007 to the 2015 was 114.8. What was the cost of a week of groceries in 2015? Express your answer as a dollar amount to the nearest dollar.

4. The consumer price index, CPI, is a comparison of the cost for products that provide basic needs from a time in the past to the current.

$$CPI = \frac{\text{Current\_Cost}}{\text{Cost\_in\_Past}} \times 100$$

Item	Current Cost in 2014	Cost in 2004
New home	211,899	\$172,276
Week of groceries	80.31	65.29
Compact car	15,914	12,938
Basic outfit	213	173

Set the Way-Back time machine to have a current year of 2014. What was the CPI for the price of a compact car from 2004 to 2014 according to the information in the table? Express your answer to the nearest tenth.

5. The consumer price index, CPI, is a comparison of the cost for products that provide basic needs from a time in the past to the current.

$$CPI = \frac{\text{Current\_Cost}}{\text{Cost\_in\_Past}} \times 100$$

Item	Current Cost in 2010	Cost in 2002
New home	189,513	\$160,062
Week of groceries	74.64	63.04
Compact car	15,414	13,019
Basic outfit	175	148

Set the Way-Back time machine to have a current year of 2010. What was the CPI for the price of a week of groceries from 2002 to 2010 according to the information in the table? Express your answer to the nearest tenth.

6. The consumer price index, CPI, is a comparison of the cost for products that provide basic needs from a time in the past to the current.

$$CPI = \frac{\text{Current\_Cost}}{\text{Cost\_in\_Past}} \times 100$$

Item	Current Cost in 2010	Cost in 2007
New home	\$196,736	
Week of groceries	73	
Compact car	16,237	
Basic outfit	189	

Set the Way-Back time machine to have a current year of 2010. The CPI for the above prices from 2007 to the 2010 was 106.2. What was the cost of a new home in 2007? Express your answer as a dollar amount to the nearest dollar.

7. The consumer price index, CPI, is a comparison of the cost for products that provide basic needs from a time in the past to the current.

$$CPI = \frac{\text{Current\_Cost}}{\text{Cost\_in\_Past}} \times 100$$

Item	Current Cost in 2012	Cost in 2005
New home	\$197,156	
Week of groceries	75	
Compact car	16,203	
Basic outfit	225	

Set the Way-Back time machine to have a current year of 2012. The CPI for the above prices from 2005 to the 2012 was 116.6. What was the cost of a week of groceries in 2005? Express your answer as a dollar amount to the nearest dollar.

8. The consumer price index, CPI, is a comparison of the cost for products that provide basic needs from a time in the past to the current.

$$CPI = \frac{\text{Current\_Cost}}{\text{Cost\_in\_Past}} \times 100$$

Item	Current Cost in 2011	Cost in 1999
New home	\$198,712	
Week of groceries	75	
Compact car	15,533	
Basic outfit	184	

Set the Way-Back time machine to have a current year of 2011. The CPI for the above prices from 1999 to the 2011 was 128.4. What was the cost of a compact car in 1999? Express your answer as a dollar amount to the nearest dollar.

**CPI Consumer Price Index  
Answer Section**

**NUMERIC RESPONSE**

1. ANS: 16,695

PTS: 1

2. ANS: 15,301

PTS: 1

3. ANS: 80

PTS: 1

4. ANS: 123.0

PTS: 1

5. ANS: 118.4

PTS: 1

6. ANS: 185,250

PTS: 1

7. ANS: 64

PTS: 1

8. ANS: 12,097

PTS: 1

