

Year	Price X	Quantity X	Price Y	Quantity Y	Price Z	Quantity Z	Nominal GDP
1	1	100	0.5	50	0.6	10	$(1 \times 100) + (0.5 \times 50) + (0.6 \times 10) = 131$
2	2	100	1	50	1.2	10	$(2 \times 100) + (1 \times 50) + (1.2 \times 10) = 262$
3	4	100	2	50	2.4	10	$(4 \times 100) + (2 \times 50) + (2.4 \times 10) = 524$
4	8	100	4	50	4.8	10	$(8 \times 100) + (4 \times 50) + (4.8 \times 10) = 1,048$



Quantities
produced are the
same

A red speech bubble with a tail pointing towards the top right corner of the image. The bubble contains the text "Real GDP tells us that production is the same". The words "Real", "is", and "same" are colored red, while "GDP", "tells us", "that", "production", and "the" are in black.

Real GDP tells us
that production is the
same

the 1990s, the number of people in the UK who are employed in the public sector has increased by 1.5 million (1990–1999) (Department of Health 2000).

There is a growing emphasis on the importance of the public sector in the provision of health care services, and the need to ensure that the public sector is able to meet the needs of the population. This has led to a number of initiatives aimed at improving the efficiency and effectiveness of the public sector, including the introduction of the NHS and the creation of the Health Service Commissioners.

The NHS is a public sector organization that provides health care services to the population. It is a large and complex organization, and it is important to ensure that it is able to meet the needs of the population. The Health Service Commissioners are responsible for ensuring that the NHS is able to meet the needs of the population, and they are also responsible for ensuring that the NHS is able to provide high quality care.

The Health Service Commissioners are responsible for ensuring that the NHS is able to meet the needs of the population, and they are also responsible for ensuring that the NHS is able to provide high quality care. They are also responsible for ensuring that the NHS is able to provide value for money, and they are also responsible for ensuring that the NHS is able to provide a good experience for patients.

The Health Service Commissioners are responsible for ensuring that the NHS is able to meet the needs of the population, and they are also responsible for ensuring that the NHS is able to provide high quality care. They are also responsible for ensuring that the NHS is able to provide value for money, and they are also responsible for ensuring that the NHS is able to provide a good experience for patients.

The Health Service Commissioners are responsible for ensuring that the NHS is able to meet the needs of the population, and they are also responsible for ensuring that the NHS is able to provide high quality care. They are also responsible for ensuring that the NHS is able to provide value for money, and they are also responsible for ensuring that the NHS is able to provide a good experience for patients.

The Health Service Commissioners are responsible for ensuring that the NHS is able to meet the needs of the population, and they are also responsible for ensuring that the NHS is able to provide high quality care. They are also responsible for ensuring that the NHS is able to provide value for money, and they are also responsible for ensuring that the NHS is able to provide a good experience for patients.

The Health Service Commissioners are responsible for ensuring that the NHS is able to meet the needs of the population, and they are also responsible for ensuring that the NHS is able to provide high quality care. They are also responsible for ensuring that the NHS is able to provide value for money, and they are also responsible for ensuring that the NHS is able to provide a good experience for patients.

The Health Service Commissioners are responsible for ensuring that the NHS is able to meet the needs of the population, and they are also responsible for ensuring that the NHS is able to provide high quality care. They are also responsible for ensuring that the NHS is able to provide value for money, and they are also responsible for ensuring that the NHS is able to provide a good experience for patients.

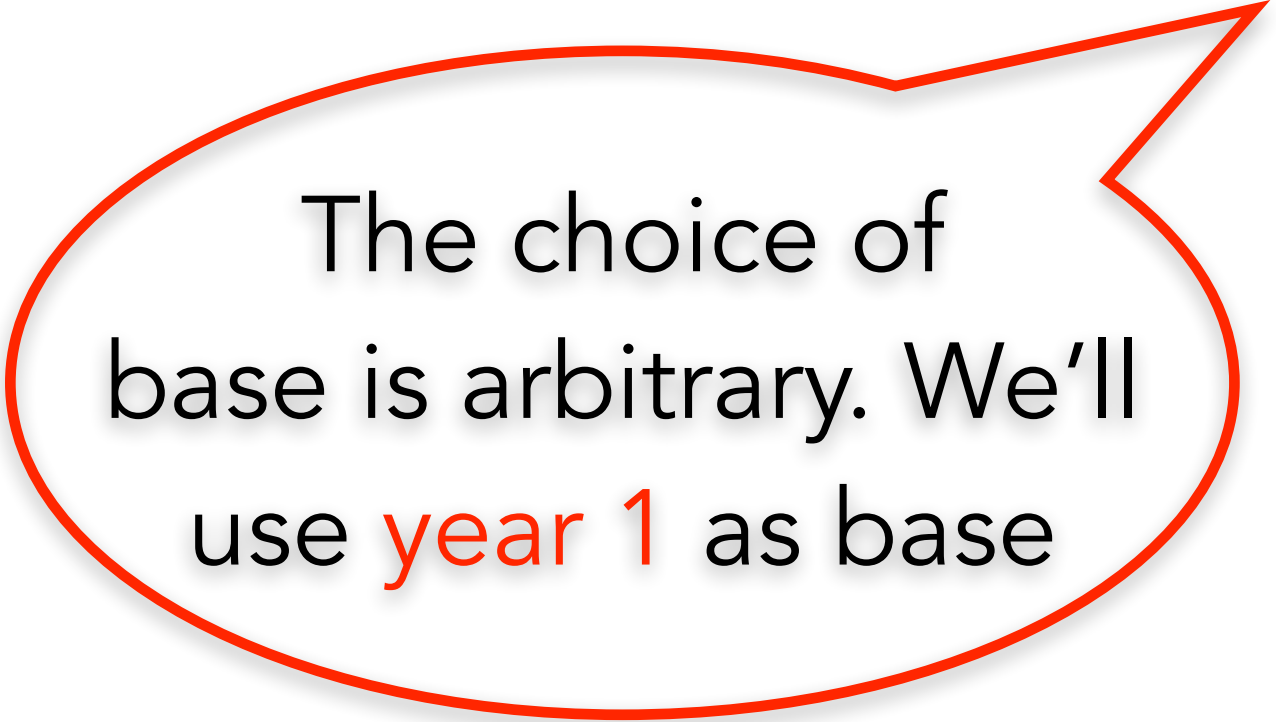
The Health Service Commissioners are responsible for ensuring that the NHS is able to meet the needs of the population, and they are also responsible for ensuring that the NHS is able to provide high quality care. They are also responsible for ensuring that the NHS is able to provide value for money, and they are also responsible for ensuring that the NHS is able to provide a good experience for patients.

The Health Service Commissioners are responsible for ensuring that the NHS is able to meet the needs of the population, and they are also responsible for ensuring that the NHS is able to provide high quality care. They are also responsible for ensuring that the NHS is able to provide value for money, and they are also responsible for ensuring that the NHS is able to provide a good experience for patients.


The Health Service Commissioners are responsible for ensuring that the NHS is able to meet the needs of the population, and they are also responsible for ensuring that the NHS is able to provide high quality care. They are also responsible for ensuring that the NHS is able to provide value for money, and they are also responsible for ensuring that the NHS is able to provide a good experience for patients.

The Health Service Commissioners are responsible for ensuring that the NHS is able to meet the needs of the population, and they are also responsible for ensuring that the NHS is able to provide high quality care. They are also responsible for ensuring that the NHS is able to provide value for money, and they are also responsible for ensuring that the NHS is able to provide a good experience for patients.

To calculate **Real** GDP first
we choose a "**base**" year



The choice of
base is arbitrary. We'll
use **year 1** as base

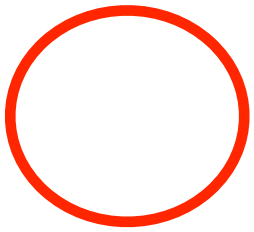
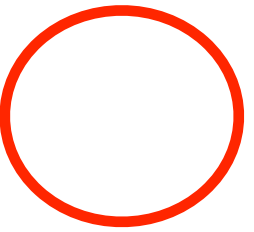
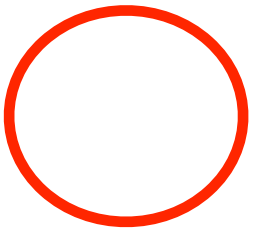


Pretend that prices
did not change from what
they were in year 1

1

0.5

0.6



1

0.5

0.6

1

0.5

0.6

$$\text{Real GDP} = P_{x\text{base}}Q_x + P_{y\text{base}}Q_y + P_{z\text{base}}Q_z$$

Real GDP

$$(1 \times 100) + (0.5 \times 50) + (0.6 \times 10) = 131$$

$$(1 \times 100) + (0.5 \times 50) + (0.6 \times 10) = 131$$

$$(1 \times 100) + (0.5 \times 50) + (0.6 \times 10) = 131$$

$$(1 \times 100) + (0.5 \times 50) + (0.6 \times 10) = 131$$

the 1990s, the number of people in the UK who are aged 65 and over has increased by 1.5 million (1990–1999) and is projected to increase by a further 1.5 million by 2010 (Office for National Statistics 2000). The number of people aged 65 and over in the UK is projected to increase from 10.5 million in 1999 to 12.5 million in 2010, with the number of people aged 75 and over increasing from 4.5 million to 6.5 million in the same period (Office for National Statistics 2000). The increase in the number of people aged 65 and over is projected to be particularly marked in the 75–84 age range, with the number of people in this age range increasing from 1.5 million in 1999 to 2.5 million in 2010 (Office for National Statistics 2000).

There is a growing awareness of the need to address the health and social care needs of the ageing population. The Department of Health (2000) has identified the need to develop a 'new paradigm' of health and social care for the ageing population, which is based on the principles of 'active ageing' and 'lifestyle medicine'. The 'new paradigm' is based on the idea that people should be able to live longer, healthier, and more active lives, and that health and social care should be designed to support this goal.

The 'new paradigm' is based on the idea that people should be able to live longer, healthier, and more active lives, and that health and social care should be designed to support this goal. The 'new paradigm' is based on the idea that people should be able to live longer, healthier, and more active lives, and that health and social care should be designed to support this goal. The 'new paradigm' is based on the idea that people should be able to live longer, healthier, and more active lives, and that health and social care should be designed to support this goal.

The 'new paradigm' is based on the idea that people should be able to live longer, healthier, and more active lives, and that health and social care should be designed to support this goal. The 'new paradigm' is based on the idea that people should be able to live longer, healthier, and more active lives, and that health and social care should be designed to support this goal. The 'new paradigm' is based on the idea that people should be able to live longer, healthier, and more active lives, and that health and social care should be designed to support this goal.

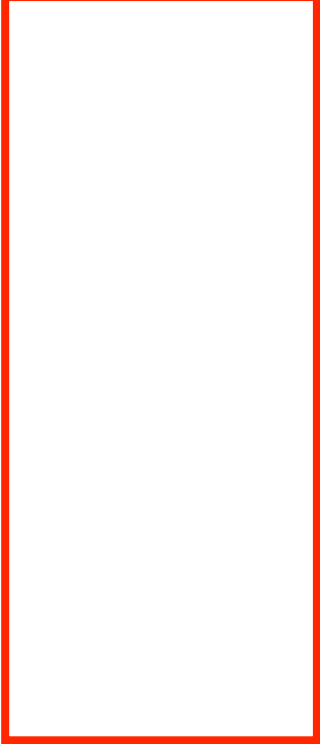
The 'new paradigm' is based on the idea that people should be able to live longer, healthier, and more active lives, and that health and social care should be designed to support this goal. The 'new paradigm' is based on the idea that people should be able to live longer, healthier, and more active lives, and that health and social care should be designed to support this goal. The 'new paradigm' is based on the idea that people should be able to live longer, healthier, and more active lives, and that health and social care should be designed to support this goal.

The 'new paradigm' is based on the idea that people should be able to live longer, healthier, and more active lives, and that health and social care should be designed to support this goal. The 'new paradigm' is based on the idea that people should be able to live longer, healthier, and more active lives, and that health and social care should be designed to support this goal. The 'new paradigm' is based on the idea that people should be able to live longer, healthier, and more active lives, and that health and social care should be designed to support this goal.

The 'new paradigm' is based on the idea that people should be able to live longer, healthier, and more active lives, and that health and social care should be designed to support this goal. The 'new paradigm' is based on the idea that people should be able to live longer, healthier, and more active lives, and that health and social care should be designed to support this goal. The 'new paradigm' is based on the idea that people should be able to live longer, healthier, and more active lives, and that health and social care should be designed to support this goal.

The 'new paradigm' is based on the idea that people should be able to live longer, healthier, and more active lives, and that health and social care should be designed to support this goal. The 'new paradigm' is based on the idea that people should be able to live longer, healthier, and more active lives, and that health and social care should be designed to support this goal. The 'new paradigm' is based on the idea that people should be able to live longer, healthier, and more active lives, and that health and social care should be designed to support this goal.

The 'new paradigm' is based on the idea that people should be able to live longer, healthier, and more active lives, and that health and social care should be designed to support this goal. The 'new paradigm' is based on the idea that people should be able to live longer, healthier, and more active lives, and that health and social care should be designed to support this goal. The 'new paradigm' is based on the idea that people should be able to live longer, healthier, and more active lives, and that health and social care should be designed to support this goal.



Pretend that prices did not change from what they were in year 1

Real GDP= $P_{xbase}Q_x + P_{ybase}Q_y + P_{zbase}Q_z$

Year	Price X	Quantity X	Price Y	Quantity Y	Price Z	Quantity Z	Real GDP
1	1	100	0.5	50	0.6	10	(1x100)+(0.5x50)+(0.6x10)= 131
2	1	100	0.5	50	0.6	10	(1x100)+(0.5x50)+(0.6x10)= 131
3	1	100	0.5	50	0.6	10	(1x100)+(0.5x50)+(0.6x10)= 131
4	1	100	0.5	50	0.6	10	(1x100)+(0.5x50)+(0.6x10)= 131

Quantities produced are the same

Real GDP tells us that production is the same

If Prices **rise**

Year	Price X	Quantity X	Price Y	Quantity Y	Price Z	Quantity Z	Nominal GDP
1	1	100	0.5	50	0.6	10	$(1 \times 100) + (0.5 \times 50) + (0.6 \times 10) = 131$
2	2	110	1	60	1.2	20	$(2 \times 100) + (1 \times 50) + (1.2 \times 10) = 304$
3	4	120	2	70	2.4	30	$(4 \times 100) + (2 \times 50) + (2.4 \times 10) = 692$
4	8	130	4	80	4.8	40	$(8 \times 100) + (4 \times 50) + (4.8 \times 10) = 1,552$