

Interpreting Data: Greenhouse Gas Emissions



Percentages


A percentage describes a part of a total amount.


In a test you might score 75 out of a total possible score of 100.

Your results would be 75% correct.



$$\text{percentage} = \frac{75}{100} \times 100$$

Use the  button

Use the  button

You can type these numbers into a calculator.

What if the total score isn't 100?

If the test had 200 questions and you answered 150 questions correctly...

What percentage would you have correct?



$$\text{percentage} = \frac{150}{200} \times 100$$

The amount you have correct

The total amount of questions

$$= ?$$

Working Out Percentages:

Countries Most Contributing to Greenhouse Gas Emissions

Based on Data for Global CO₂ Emissions 2015

World Total

CO₂ Emissions:

36240721 Ktons

| Country | CO ₂ Emissions in Ktons | Country | CO ₂ Emissions in Ktons |
|--------------------|------------------------------------|----------------|------------------------------------|
| China | 10641788.99 | Saudi Arabia | 505565.10 |
| USA | 5172337.73 | Indonesia | 502961.30 |
| European Union 28 | 3469670.82 | Brazil | 486229.08 |
| India | 2454968.12 | Mexico | 472017.79 |
| Russian Federation | 1760895.31 | Australia | 446348.29 |
| Japan | 1252889.87 | South Africa | 417160.99 |
| Germany | 777905.50 | United Kingdom | 398524.37 |
| Iran | 633749.58 | Turkey | 357157.41 |
| Republic of Korea | 617284.88 | Italy | 352885.93 |
| Canada | 555400.90 | France | 327787.26 |

Source: EDGARv4.3.2, European Commission, Joint Research Centre (JRC)/PBL Netherlands Environmental Assessment Agency. Emission Database for Global Atmospheric Research (EDGAR)

What percentage of the World's total CO2 Emissions does Australia contribute?

World Total
CO2 Emissions:

36240721 Ktons

Australia
CO2 Emissions:

446348.29 Ktons



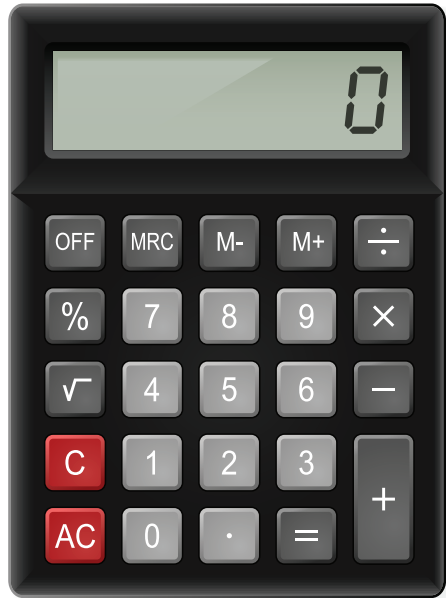
Which buttons will you press to calculate this answer?

$$\text{percentage} = \frac{446348.29}{36240721} \times 100 = ?$$

What is your answer if you round off to 2 decimal places?

How to use the percentage button on a calculator:

You can fast track your calculations if your calculator has a percentage button.




percentage = $\frac{150}{200} \times 100$

The amount you have correct (arrow pointing to 150)

The total amount of questions (arrow pointing to 200)

(A red circle highlights the $\times 100$ part of the equation, with an arrow pointing to it from the text below.)

To fast-track:
Press the percentage  button instead

1 5 0 ÷ 2 0 0 %

instead of:

× 1 0 0