Function notation and models

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A sample from this topic. The complete topic collection contains three different resources and worked solutions.

Read the explanation and worked example. Show your working; use a calculator only where asked.

What you will practise

• Use function notation with domains, ranges and contextual inputs.

• Explain a method and check the reasonableness of a result.

Useful starting skills: Use the prerequisite operations and representations shown in the worked example.

A function assigns one output to each permitted input. f(x) names that output; it is not f multiplied by x. Specify the domain when context restricts inputs.

Evaluate by substituting into every occurrence of the input. A range describes resulting outputs, and contextual units explain what both quantities mean.

Worked example

For $f(x)=2x^2-3$, find $f(-2)$.

Replace x by -2 using brackets.

$2(-2)^2-3=8-3$.

Answer: 5

Try it yourself

Name: _____ Date: _____

1. For $f(x)=3x+4$, find $f(5)$.

2. For $g(t)=t^2-1$, find $g(-3)$.

Answers and explanations

Check the method as well as the final answer. An alternative correct method is also valid.

1. 19

$3\times5+4$.

2. 8

$(-3)^2-1$.

Curriculum reference: VC2M10AA08

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