

Variation using a maths GCSE question

Year 11 (Higher)

HIAS Maths Team (secondary) January 2021 Final version

© Hampshire County Council





Overview

This document contains...

A set of connected questions that link to a past GCSE question

Points to consider when using this resource

Each variation of the exam question should be considered as part of a learning journey. Teachers may wish to consider models and images to support students to access the problems.







Year 11 H: variation: AQA 2018 P1 Q6

Fractions of quantities and equivalent fractions







Prior knowledge to review

- Division strategies
- Place value knowledge and multiplication by 100
- Knowledge of tables and associated facts
- Equivalent fractions
- Simplification of fractions using factors
- Recognition of primes to 100
- Knowledge of the whole and the part as a numerator and a denominator







The height of Zak is 180 centimetres
The height of Fred is 160 centimetres

Write the height of Zak as a fraction of the height of Fred.

Give your answer in its simplest form.







The height of Zak is 1.8 metres
The height of Fred is 1.6 metres

Write the height of Zak as a fraction of the height of Fred. Give your answer in its simplest form.







The height of Zak is 1.7 metres
The height of Fred is 1.4 metres

Write the height of Zak as a fraction of the height of Fred.

Give your answer in its simplest form.







The height of Zak is 1.84 metres
The height of Fred is 1.38 metres

Write the height of Zak as a fraction of the height of Fred. Give your answer in its simplest form.







Year 11 H: variation: AQA 2018 P1 Q6

Fractions of quantities and equivalent fractions

6 The height of Zak is 1.86 metres.

The height of Fred is 1.6 metres.

Write the height of Zak as a fraction of the height of Fred.

Give your answer in its simplest form.







The height of Zak is 1.85 metres
The height of Fred is 1.11 metres

Write the height of Zak as a fraction of the height of Fred. Give your answer in its simplest form.

Write the height of Zak as a percentage of the height of Fred

Write the height of Fred as a fraction of the height of Zac







HIAS Maths Team (secondary)

Contact details

Jo.Lees@hants.gov.uk

Jenny.Burn@hants.gov.uk

For further details on the full range of services available please contact us using the following details:

Tel: 01962 874820 or email: hias.enquiries@hants.gov.uk







Upcoming Courses

Keep up-to-date with our learning opportunities for each subject through our Upcoming Course pages linked below. To browse the full catalogue of learning offers, visit our new Learning Zone. Full details of how to access the site to make a booking are provided here.

- English
- Maths
- Science
- Geography
- <u>RE</u>
- History
- <u>Leadership</u>
- Computing
- Art
- D&T
- Assessment
- Support Staff
- SEN







Terms and Conditions

Terms of licence

Moodle+ subscribers are licenced to access and use this resource and have agreed to pay the annual subscription fee. This authority starts when the fee is paid and ends when the subscription period expired unless it is renewed. This file is for personal or classroom use only. By using it, you agree that you will not copy or reproduce this file except for your own personal, non-commercial use. HIAS have the right to modify the terms of this agreement at any time; the modification will be effective immediately and shall replace all prior agreements.

You are welcome to:

- · download this resource
- save this resource on your computer
- · print as many copies as you would like to use in your school
- amend this electronic resource so long as you acknowledge its source and do not share as your own work.

You may not:

- · claim this resource as your own
- sell or in any way profit from this resource
- store or distribute this resource on any other website or another location where others are able to electronically retrieve it
- email this resource to anyone outside your school or transmit it in any other fashion.



