Percentage Passes

ACTIVITY

Hine and Josh are in two different classes. They compare their test results.

Subject	Hine	Josh
English	$\frac{17}{20}$	$\frac{24}{30}$
Maths	$\frac{45}{50}$	$\frac{32}{40}$
Science	$\frac{19}{25}$	$\frac{17}{20}$
Social studies	$\frac{27}{30}$	$\frac{18}{20}$

1. **a.** In which subjects did Hine get a higher mark than Josh?
   b. In which subject did Josh get a higher mark than Hine?
   c. In which subject did they get the same mark?
   d. Show how you worked out your answers.

You may find it useful to convert the marks into percentages.

2. What can you say about Hine's mean percentage score compared to Josh's?

You could round each of the mean percentage scores to a whole number.

The mean is sometimes called the average.

3.

Based on percentages, if I'd got two more marks in science, I'd have had a mean of 86%.

Well, yes, but if I'd got one more mark in science, we'd both have had a mean of 86%!

a. Is Josh right? Explain your answer.
b. Explain how Hine might justify her statement.