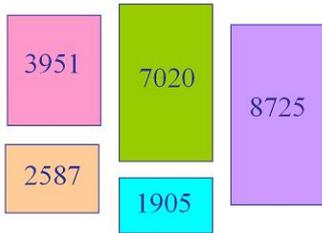
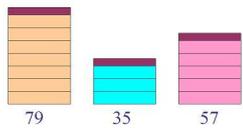


BIGGEST DIVISOR SAME REMAINDER



What is the largest number that, when divided into each of 1905, 2587, 3951, 7020 and 8725, leaves the same remainder every time?

When a problem seems difficult a good strategy is to try a **simpler case**.



The diagram should help you to find the answer to the same question for 79, 35 and 57 and it should give you a hint for the method to use for the more difficult problem.

Help

An even simpler case you could work on is to do the same problem for the three numbers 20, 38 and 50. This is much easier as the numbers are smaller and you have to work on 3 numbers rather than 5 numbers. Once you have succeeded with the two simple cases go back to the big challenge.

See also 'Spot The Mistake' to help you to review the operation of division:
<https://aiminghigh.aimssec.ac.za/years-4-7-spot-the-mistake/>

Extension

Make up your own similar problems and exchange them with a partner so that you solve each other's problem.

The 'Magic Numbers' activity also involves division:
<https://aiminghigh.aimssec.ac.za/years-5-9-magic-numbers/>