

Here is Gemma and Flo's work:

$$47 \div 20 = 2.35$$

$$47 \div 15 = 3.1333333$$

$$47 \div 17 = 2.7647058$$

$$46 \div 17 = 2.7058823$$

$$45 \div 17 = 2.6420588$$

$$42 \div 17 = 2.4705882$$

$$62 \div 15 = 2.8$$

$$62 \div 16 = 2.625$$

$$40 \div 16 = 2.5$$

$$41 \div 16 = 2.5625$$

$$42 \div 16 = 2.9375$$

$$46 \div 14 = 2.8571428$$

$$39 \div 12 = 3.25$$

$$39 \div 18 = 3$$

$$39 \div 11 = 3.5454545$$

$$39 \div 15 = 2.6$$

$$38 \div 12 = 3.1666666$$

$$38 \div 13 = 2.9230769$$

$$37 \div 11 = 3.3636363$$

$$37 \div 12 = 3.0833333$$

~~$$37 \div 10 = 3.7$$~~

~~$$37 \div 11 = 3.3636363$$~~

~~$$37 \div 10.5 = 3.8947368$$~~

~~$$36 \div 12 = 3.0$$~~

~~$$36.5 \div 10 = 3.65$$~~

~~$$35.5 \div 10 = 3.55$$~~

~~$$35 \div 4 = 8.75$$~~

Richard wrote the following:

3.125 > numbers 1 up

He explained:

“I multiplied 3.125 by 1, then I tried multiplying 3.125 by 2, then I multiplied 3.125 by 3 ...”

Here is the start of Thomas' work:

“I first looked at the number 0.125 and worked out what fraction of 1 it is. It turned out that it was an eighth.”

Can you take each of these starting ideas and develop them into a solution?