

## Use Factor Pairs

1. Circle the person who has used the correct factor pair to solve the calculation below.



Jack

$$17 \times 9$$

$$\begin{aligned} 17 \times 9 &= 17 \times 5 \times 4 \\ 17 \times 5 &= 85 \\ 85 \times 4 &= 340 \end{aligned}$$



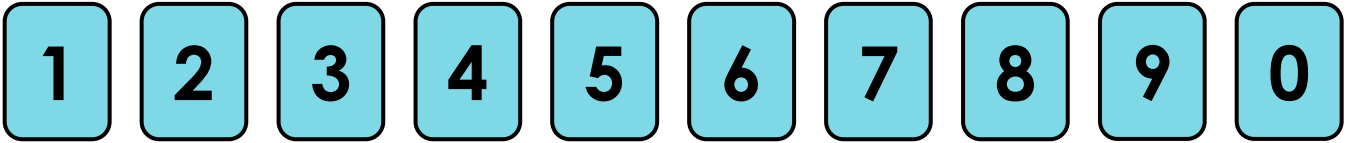
Ruby

$$\begin{aligned} 17 \times 9 &= 17 \times 3 \times 3 \\ 17 \times 3 &= 51 \\ 51 \times 3 &= 153 \end{aligned}$$

VF

2. Fearne has the digit cards below. She wants to find the factor pairs she needs to solve her calculation.

$$8 \times 20$$



Find the factor pairs she can create and solve her calculation. You can use the cards to make 2-digit numbers.

VF

3. Giuseppe has the calculation below. He has given Pearl the factor pair and has asked her to solve it.

$$15 \times 8 = 15 \times 2 \times 4$$



I can only solve it by working out  $15 \times 2 \times 4$  as this is the way the calculation is written.  $15 \times 2 = 30$ .  $30 \times 4 = 120$ .

Do you agree? Explain your reasoning.

R

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1. Ruby
2.  $8 \times 20 = 8 \times 5 \times 4$ ;  $8 \times 5 = 40$ ;  $40 \times 4 = 160$ ;  $8 \times 20 = 8 \times 10 \times 2$ ;  $8 \times 10 = 80$ ;  $80 \times 2 = 160$
3. No, I disagree because multiplication is commutative therefore, it can be done in any order.  $15 \times 2 \times 4 = 15 \times 4 \times 2$ .  $15 \times 4 = 60$   $60 \times 2 = 120$