

# Discussion Problems

## Step 1: Multiply by 10

### National Curriculum Objectives:

Mathematics Year 4: (4C6a) [Recall multiplication and division facts for multiplication tables up to  \$12 \times 12\$](#)

Mathematics Year 4: (4C6b) [Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers](#)

### About this resource:

This resource has been designed for pupils who understand the concepts within [this step](#). It provides pupils with more opportunities to enhance their reasoning and problem solving skills through more challenging problems. Pupils can work in pairs or small groups to discuss with each other about how best to tackle the problem, as there is often more than one answer or more than one way to work through the problem.

There may be various answers for each problem. Where this is the case, we have provided one example answer to guide discussion.

We recommend self or peer marking using the answer page provided to promote discussion and self-correction.

More [Year 4 Multiplication and Division](#) resources.

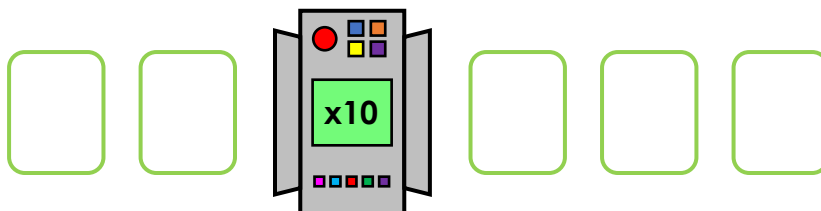
Did you like this resource? Don't forget to [review](#) it on our website.

# Multiply by 10

1. Gethin is exploring different numbers in order to reach a target of between 560 and 830.



I can find 5 different ways to hit my target.



Use the digit cards below to explore the numbers Gethin could place into his function machine to reach his target.

He can only put each card into the machine once.



Is Gethin correct?

DP

2. Grace is planning some trips. She wants to travel to at least 2 different destinations. She wants her total distance to be less than 1,000 miles as she is thinking about the impact on the environment.



Country	Distance
Genovia	10 times further than Tropicia
Zuy	10 times 32 add 24 times 10
Bengalia	10 times 59
Nibia	10 times 61 subtract 10 times 12
Tropicia	39 miles



Explore the different destinations she could visit.

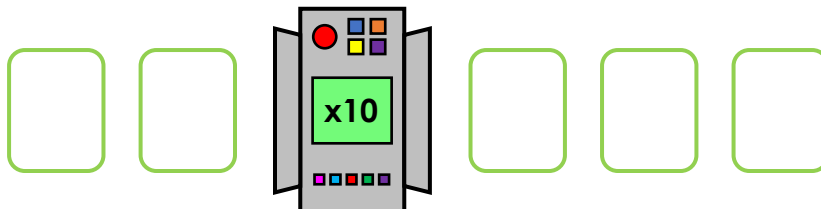
DP

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I can find 5 different ways to hit my target.



Use the digit cards below to explore the numbers Gethin could place into his function machine to reach his target.

He can only put each card into the machine once.



Is Gethin correct?

**No, there are only 3 ways to hit the target. Various answers, for example 57, 61, 82.**

DP

2. Grace is planning some trips. She wants to travel to at least 2 different destinations. She wants her total distance to be less than 1,000 miles as she is thinking about the impact on the environment.



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Genovia	10 times further than Tropicia
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Nibia	10 times 61 subtract 10 times 12
Tropicia	39 miles



Explore the different destinations she could visit.

**Various answers, for example:  
Genovia, Nibia and Tropicia - 919 miles.**

DP