Target Practice

CALCULATOR CRUNCH

DAY 2
Target Practice!

- Choose a starting number and a target number
- Find the number which, when multiplied by the starting number equals the target number.
- Use these numbers to start and then choose some of your own

Starting number
15
4
24
19

Target number
255
14
300
226.1

Starting number x ☐ = Target number

Keys allowed:
× =

- What if the target number is smaller than the starting number?

Aim of the activity

To estimate and use trial and improvement.
The aim is to find the number that you need to multiply a starting number by so that the answer is as close as possible to the target number.

e.g. $15 \times ? = 255$
Remember though that only the multiplication and equals keys are to be used as well as the digit keys. The division key is not to be used!

Starting number × ☐ = Target number

Keys allowed:
× =

- What strategies did you use?
- Can you set a really tricky one for a friend?
- What if the target number is smaller than the starting number?

You need to work out what the number in the box is for each of the starting numbers.
Can it always be a whole number or will you need to use decimals?

Top Tips

Estimating the answer first is useful.
It might help to start by doing a multiplication that you can do in your head like doubling or multiplying by 10.
Think about the answer you get and decide if you need to multiply by a bigger or smaller number.

These sentences might help you to think about how you will change the number you use:

The answer is too small so I need to multiply by a *larger / smaller* **number**

The answer is too big so I need to multiply by a *larger / smaller* **number**

In this example
$15 \times ? = 255$
$15 \times 10 = 150$

The answer is too small so I need to multiply by a *larger* **number**

- What if the target number is smaller than the starting number?

What if the starting number was 24 and the target number was 12?
What would you need to multiply the 24 by?
How do you use multiplication to give an answer (a product) which is smaller than the starting number?

Do the sentences change if your target number is smaller than your starting number?

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