

Odd and Even Numbers using the Four Operations Open-Ended Task

I can investigate if the result of a number problem will be an odd or even number. (ACMNA071)

When we use odd numbers in a mathematics problem will the answer also be odd?

Investigate this question by making estimates and then checking your guess by completing two different number problems for each operation.

Number Problem	Answer Estimation (Circle whether you think the answer will be an odd or even number)	Example	Odd or Even?	Was my guess correct?
Odd + Odd =	<input checked="" type="radio"/> Odd <input type="radio"/> Even	$7 + 3 = 10$	Even	No
Odd + Odd =	<input type="radio"/> Odd <input type="radio"/> Even			
Odd + Even =	<input type="radio"/> Odd <input type="radio"/> Even			
Odd + Even =	<input type="radio"/> Odd <input type="radio"/> Even			
Even + Even =	<input type="radio"/> Odd <input type="radio"/> Even			
Even + Even =	<input type="radio"/> Odd <input type="radio"/> Even			
Odd - Odd =	<input type="radio"/> Odd <input type="radio"/> Even			
Odd - Odd =	<input type="radio"/> Odd <input type="radio"/> Even			
Odd - Even =	<input type="radio"/> Odd <input type="radio"/> Even			
Odd - Even =	<input type="radio"/> Odd <input type="radio"/> Even			
Even - Even =	<input type="radio"/> Odd <input type="radio"/> Even			

Even - Even =	Odd	Even			
Odd × Odd =	Odd	Even			
Odd × Odd =	Odd	Even			
Odd × Even =	Odd	Even			
Odd × Even =	Odd	Even			
Even × Even =	Odd	Even			
Even × Even =	Odd	Even			
Odd ÷ Odd =	Odd	Even			
Odd ÷ Odd =	Odd	Even			
Odd ÷ Even =	Odd	Even			
Odd ÷ Even =	Odd	Even			
Even ÷ Even =	Odd	Even			
Even ÷ Even =	Odd	Even			

Reflection

Did the matching number operation problems give the same odd or even result?

What have you learnt from this number investigation?

Going Further

Complete some more complex number problems to investigate if there is a link between the answer being odd or even when completing certain number problems.

(For example: See if there are any patterns that occur / certain numbers that when multiplied always result in an odd number answer).