

AFRICAN INSTITUTE FOR MATHEMATICAL SCIENCES

SCHOOLS ENRICHMENT CENTRE (AIMSSEC)

AIMING HIGH

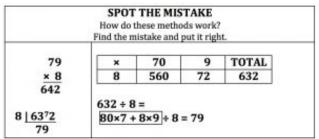
SPOT THE MISTAKE

Here are some calculations.

There are some mistakes and some correct methods and correct answers.

Find the mistakes and write out the correct calculation using that method.

Explain how and why the methods that get the correct answers work.



SPOT THE MISTAKE How do these methods work? Find the mistake and put it right.							
239 <u>×7</u>	× 7	200 1400	30 210	9 63	TOTAL 1673		
1673 7 16 ² 7 ⁶ 3 2 3 8	1673 ÷ 7						

SPOT	THE M	STAKE		
How do these methods work?				
Find the m	istake an	d put it rig	ht.	
	×	20	9	
29	50	1000	450	
<u>×51</u>	1	20	9	
145				
290	290 435 29 × 51 = 1000 + 450 + 20 + 9			
435				
	= 1479			
29 × 51	29 × 51			
$= 30 \times 51 - 51$	$= 29 \times 50 + 29$			
= 1530 - 51	= 145 × 100 + 29			
= 1479	= 1450 + 29			
	= 1479	9		

HELP

If you are stuck with the SPOT THE MISTAKE task the do the following.

- Do the calculations using any method you choose, and then check your calculation using a calculator.
- If you got it wrong look for your own mistake. If you can't find it, ask for help.

If you get the calculation correct then have a go at spotting the mistakes in the example.

NEXT

	How do t	THE MIST	ls work?		
	Find the m	iistake and p	ut it right.	9	
	×	100	20	9	TOTAL
129	30	3000	600	270	3870
<u>×34</u>	4	400	80	36	516
486 <u>3870</u> 4356	129 × 34 = 3870 + 516 = 4386				

SPOT THE MISTAKE How do these methods work? Find the mistake and put it right.					
129 <u>*512</u> 258 1290 64500 65948	× 500 10 2	100 50000 1000 200	20 10000 200 40	9 4500 90 18	TOTAL 64500 1290 258
	129 × 5 = 64500 = 66048	0 + 1290	+ 258		

Make up your own written calculation, and then write it out with a deliberate mistake for your partner to spot and correct.