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SIGNIFICANT FIGURES

Full number	1sf	2sf	3sf	4sf	5sf
9.378652	9	9.4	9.38	9.379	9.3787
4204274					
0.903521					
0.00239482					

Full number	1sf	2sf	3sf	4sf	5sf
9.378652	9	9.4	9.38	9.379	9.3787
4204274	4000000				
0.903521					
0.00239482					

Full number	1sf	2sf	3sf	4sf	5sf
9.378652	9	9.4	9.38	9.379	9.3787
4204274	4000000	4200000			
0.903521					
0.00239482					

Full number	1sf	2sf	3sf	4sf	5sf
9.378652	9	9.4	9.38	9.379	9.3787
4204274	4000000	4200000	4200000		
0.903521					
0.00239482					

Full number	1sf	2sf	3sf	4sf	5sf
9.378652	9	9.4	9.38	9.379	9.3787
4204274	4000000	4200000	4200000	4204000	
0.903521					
0.00239482					

Full number	1sf	2sf	3sf	4sf	5sf
9.378652	9	9.4	9.38	9.379	9.3787
4204274	4000000	4200000	4200000	4204000	4204300
0.903521					
0.00239482					

Full number	1sf	2sf	3sf	4sf	5sf
9.378652	9	9.4	9.38	9.379	9.3787
4204274	4000000	4200000	4200000	4204000	4204300
0.903521	0.9				
0.00239482					

Full number	1sf	2sf	3sf	4sf	5sf
9.378652	9	9.4	9.38	9.379	9.3787
4204274	4000000	4200000	4200000	4204000	4204300
0.903521	0.9	0.90			
0.00239482					

Full number	1sf	2sf	3sf	4sf	5sf
9.378652	9	9.4	9.38	9.379	9.3787
4204274	4000000	4200000	4200000	4204000	4204300
0.903521	0.9	0.90	0.904		
0.00239482					

Full number	1sf	2sf	3sf	4sf	5sf
9.378652	9	9.4	9.38	9.379	9.3787
4204274	4000000	4200000	4200000	4204000	4204300
0.903521	0.9	0.90	0.904	0.9035	
0.00239482					

Full number	1sf	2sf	3sf	4sf	5sf
9.378652	9	9.4	9.38	9.379	9.3787
4204274	4000000	4200000	4200000	4204000	4204300
0.903521	0.9	0.90	0.904	0.9035	0.90352
0.00239482					

Full number	1sf	2sf	3sf	4sf	5sf
9.378652	9	9.4	9.38	9.379	9.3787
4204274	4000000	4200000	4200000	4204000	4204300
0.903521	0.9	0.90	0.904	0.9035	0.90352
0.00239482	0.002				

Full number	1sf	2sf	3sf	4sf	5sf
9.378652	9	9.4	9.38	9.379	9.3787
4204274	4000000	4200000	4200000	4204000	4204300
0.903521	0.9	0.90	0.904	0.9035	0.90352
0.00239482	0.002	0.0024			

Full number	1sf	2sf	3sf	4sf	5sf
9.378652	9	9.4	9.38	9.379	9.3787
4204274	4000000	4200000	4200000	4204000	4204300
0.903521	0.9	0.90	0.904	0.9035	0.90352
0.00239482	0.002	0.0024	0.00239		

Full number	1sf	2sf	3sf	4sf	5sf
9.378652	9	9.4	9.38	9.379	9.3787
4204274	4000000	4200000	4200000	4204000	4204300
0.903521	0.9	0.90	0.904	0.9035	0.90352
0.00239482	0.002	0.0024	0.00239	0.002395	

Full number	1sf	2sf	3sf	4sf	5sf
9.378652	9	9.4	9.38	9.379	9.3787
4204274	4000000	4200000	4200000	4204000	4204300
0.903521	0.9	0.90	0.904	0.9035	0.90352
0.00239482	0.002	0.0024	0.00239	0.002395	0.0023948

RULES – where multiplication and division is involved

Your final answer should be given to the same number of significant figures as the least number of significant figures in the data used.

e.g. Calculate the average speed of a car that travels 1557 m in 95 seconds.

4 sf 2 sf

average speed = $\frac{1557}{95}$ = **16 m/s** (2 sf)

RULES – where multiplication and division is involved

Your final answer should be given to the same number of significant figures as the least number of significant figures in the data used.

e.g. Calculate the average speed of a car that travels 1557 m in 95.0 seconds.

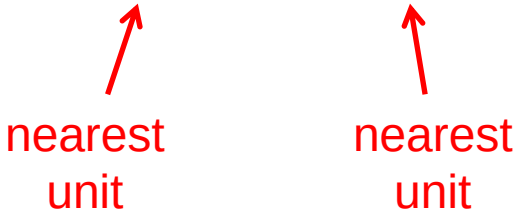
4 sf 3 sf

average speed = $\frac{1557}{95}$ = **16.4 m/s** (3 sf)

RULES – where ONLY addition/subtraction is involved

Here the number of significant figures is irrelevant – it is about the place value of the data.

e.g. *Calculate the total energy released when 263 kJ and 1282 kJ of energy are released .*



Energy released = 263 + 1282 = **1545 kJ** (nearest unit)

RULES – where ONLY addition/subtraction is involved

Here the number of significant figures is irrelevant – it is about the place value of the data.

e.g. *Calculate the total mass of calcium carbonate when 0.154 g and 0.01234 g are mixed.*

nearest 0.001 g

nearest 0.00001 g

Mass = 0.154 + 0.01234 = **0.166 g** (nearest 0.001 g)