

ARITHMETIC CHALLENGE



mental

Which should we use?



jot



written

Year 1

Single digit addition	$4 + 7 =$ $5 + 8 =$
Add three 1 digit numbers (within 20)	$2 + 6 + 5 =$ $5 + 2 + 3 =$
Subtract a 1 digit number from a 2 digit number within 20	$15 - 6 =$ $12 - 5 =$
Multiplication and division facts for 2 times table	$5 \times 2 =$ $20 \div 2 =$
Doubles within 20	Double 4 Double 6
Find half within 20	Half of 14 Half of 12
Find 1 more or less than numbers (within 20)	$4 + 1 =$ $12 - 1 =$

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Year 2

Multiplication and division facts for 5 times table	$5 \times 5 =$ $45 \div 5 =$
Multiplication and division facts for 10 times table	$5 \times 10 =$ $40 \div 10 =$
Find one more or less than any number (within 100)	$52 + 1 =$ $34 - 1 =$
Find ten more or less than any number (within 100)	$52 + 10 =$ $34 - 10 =$
Add 3 numbers (within 100)	$35 + 5 + 5 =$ $24 + 10 + 10 =$
Add and subtract multiples of 10 (within 100)	$45 + 40 =$ $82 - 60 =$
Add three multiples of 10	$10 + 60 + 20 =$ $40 + 20 + 10 =$
Add and subtract ones from a 2 digit number	$52 + 5 =$ $39 - 7 =$
Find $\frac{1}{2}$ of a number - multiples of 10 (within 100)	$\frac{1}{2}$ of 60 =
Find $\frac{1}{4}$ of a number	$\frac{1}{4}$ of 24 =
Add two 2 digit numbers (within 100)	$24 + 46 =$ $65 + 18 =$
Subtract two 2 digit numbers (within 100)	$72 - 45 =$ $63 - 34 =$

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Year 3

Find 10 more and less than a given number	$342 + 10 =$ $10 + ? = 302$	
Find 100 more and less than a given number	$564 - 100 =$ $100 + ? = 465$	
Add and subtract ones from a 3 digit number	$452 + 5 =$ $349 - 7 =$	
Add and subtract multiples of 10 from a 3 digit number	$245 + 40 =$ $632 - 60 =$	
Add and subtract multiples of 100 from a 3 digit number	$234 + 500 =$ $741 - 300 =$	
Multiplication and division facts for 4 times table	$5 \times 4 =$ $44 \div 4 =$	
Multiplication and division facts for 8 times table	$5 \times 8 =$ $48 \div 8 =$	
Multiplication and division facts for 3 times table	$5 \times 3 =$ $15 \div 3 =$	
Add and subtract fractions with the same denominator within one whole	$\frac{2}{6} + \frac{2}{6} =$	$\frac{5}{6} - \frac{2}{6} =$
Find $\frac{1}{2}$ of a number	$\frac{1}{2}$ of 24 =	
Find $\frac{1}{4}$ of a number	$\frac{1}{4}$ of 24 =	
Add and subtract tenths within one whole	$2.4 + 0.1 =$ $3.2 + 0.4 =$	
Divide 2 digit numbers by a 1 digit number	$72 \div 4 =$ $63 \div 3 =$	
Multiply and divide any number by 1	$45 \times 1 =$ $72 \div 1 =$	
Multiply and divide any number by 0	$45 \times 0 =$ $72 \div 0 =$	

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Year 4

Find 10 more and less than a given number	$3242 + 10 =$ $10 + ? = 3202$	
Find 100 more and less than a given number	$5644 - 100 =$ $100 + ? = 4625$	
Find 1000 more and less than a given number	$5644 - 1000 =$ $1000 + ? = 4625$	
Add and subtract ones from a 4 digit number	$4522 + 5 =$ $3249 - 7 =$	
Add and subtract multiples of 10 from a 4 digit number	$2415 + 40 =$ $6322 - 60 =$	
Add and subtract multiples of 100 from a 4 digit number	$2324 + 500 =$ $7421 - 300 =$	
Add and subtract multiples of 1000 from a 4 digit number	$2324 + 5000 =$ $7421 - 3000 =$	
Multiplication and division facts for 6 times table	$5 \times 6 =$ $48 \div 6 =$	
Multiplication and division facts for 7 times table	$5 \times 7 =$ $49 \div 7 =$	
Multiplication and division facts for 9 times table	$5 \times 9 =$ $18 \div 9 =$	
Add and subtract fractions with the same denominator	$\frac{2}{6} + \frac{4}{6} =$	$\frac{5}{6} - \frac{2}{6} =$
Find $\frac{1}{2}$ of a number	$\frac{1}{2}$ of 24 =	
Find $\frac{1}{4}$ of a number	$\frac{1}{4}$ of 24 =	

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Year 4

Add and subtract tenths within one whole	$2.4 + 0.1 =$ $3.2 + 0.4 =$
Add and subtract hundredths within one whole	$2.4 + 0.12 =$ $3.2 + 0.45 =$
Multiply and divide by 10	$25 \times 10 =$ $180 \div 10 =$
2 digit multiplied by 1 digit	$45 \times 6 =$ $26 \times 8 =$
3 digit multiplied by 1 digit	$425 \times 6 =$ $262 \times 8 =$
Multiples of 10 multiplications and divisions	$50 \times 9 =$ $180 \div 9 =$
Find 10% of multiples of 10 numbers	$10\% \text{ of } 60$ $10\% \text{ of } 130$

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Year 5

Multiply and divide by 10	$25 \times 10 =$ $180 \div 10 =$	
Multiply and divide by 100	$25 \times 100 =$ $180 \div 100 =$	
Multiply and divide by 1000	$25 \times 1000 =$ $180 \div 1000 =$	
Find 10% of numbers	10% of 62 10% of 136	
Find 20% of numbers	20% of 62 20% of 136	
Add and subtract decimals (up to 2dp)	$23.5 + 9.65$ $38.4 - 9.56$	
Add and subtract fractions with the same denominator	$\frac{2}{6} + \frac{4}{6} =$	$\frac{5}{6} - \frac{2}{6} =$
Multiply fractions by a whole number	$\frac{2}{6} \times 4 =$	$\frac{5}{6} \times 8 =$
Multiply fractions	$\frac{2}{6} \times \frac{4}{7} =$	$\frac{5}{6} \times \frac{2}{3} =$
Multiply 3 numbers	$2 \times 4 \times 30 =$ $6 \times 2 \times 4 =$	
Calculations with squared numbers	$2 + 3^2 =$ $4 + 5^2 =$	
Whole numbers minus decimals	$24 - 5.23 =$ $35 - 4.98$	
Multiples of 10 and 100 multiplications and divisions	$50 \times 9 =$ $180 \div 9 =$	
3 digit multiplied by 2 digit	$567 \times 78 =$ $365 \times 84 =$	
3 and 4 digit numbers divided by 1 digit	$569 \div 6 =$ $5895 \div 8 =$	

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Year 6

Multiply and divide by 10	$25 \times 10 =$ $180 \div 10 =$	
Multiply and divide by 100	$25 \times 100 =$ $180 \div 100 =$	
Multiply and divide by 1000	$25 \times 1000 =$ $180 \div 1000 =$	
Find percentage of any numbers	36% of 625 29% of 236	
Find 20% of numbers	20% of 62 20% of 136	
Add and subtract decimals (up to 2dp)	$23.5 + 9.65$ $38.4 - 9.56$	
Add and subtract fractions with different denominators	$\frac{2}{8} + \frac{4}{6} =$	$\frac{5}{9} - \frac{2}{6} =$
Multiply fractions by a whole number	$\frac{2}{6} \times 4 =$	$\frac{5}{6} \times 8 =$
Multiply fractions	$\frac{2}{6} \times \frac{4}{7} =$	$\frac{5}{6} \times \frac{2}{3} =$
Divide fractions by a whole number	$\frac{2}{6} \div 4 =$	$\frac{5}{6} \div 8 =$
4 digit multiplied by 2 digit	$5627 \times 78 =$ $3565 \times 84 =$	
3 and 4 digit numbers divided by 2 digits	$569 \div 62 =$ $5895 \div 84 =$	
BIDMAS	$40 + 3 \times 6 =$ $74 - 2 \times 8 =$	
Multiples of 10 and 100 multiplications and divisions	$50 \times 9 =$ $180 \div 9 =$	