## Year 6 Arithmetic Quiz 5

Add and subtract decimal numbers.




| $6$ | $2.8+0.06=$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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$7 \quad 1.6-0.09=$
$8 \quad 4.2-0.04=$
$9 \quad 4.5+6.36=$
$10 \quad 1.6+2.87=$



Multiply and divide by 10, 100 and 1000, including decimals.
$13 \quad 4.901 \times 10=$


$16 \quad 6.02 \times 100=$

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$17 \quad 2.62 \times 1000=$

| 18 | $0.329 \times 1000=$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| 19 | $2.71 * 10=$ |  |  |  |  |  |  |  |  |  |  |  |
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$20 \quad 18.03 \div 10=$

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$21 \quad 473 \div 100=$

$22 \quad 51.9 \div 100=$

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$23 \quad 214 \div 1000=$
$24 \quad 1292 \div 1000=$

## Percentages of amounts.

25 25\% of $246=$
$2650 \%$ of $132=$
$275 \%$ of $340=$

28 10\% of $450=$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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29 25\% of $541=$

$317 \% \times 662=$

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$32 \quad 14 \% \times 275=$

$34 \quad 35 \% \times 277=$

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|  | $15 \% \times 619=$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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36 80\% $\times 338$

## Year 6 Arithmetic Quiz 5: Answers

1. 6.2
2. 8.5
3. 8.1
4. 2.8
5. 2.62
6. 2.86
7. 1.51
8. 4.16
9. 10.86
10. 4.47
11. 3.72
12. 5.56
13. 49.01
14. 456.82
15. 526
16. 602
17. 2620
18. 329
19. 0.271
20. 1.803
21. 4.73
22. 0.519
23. 0.214
24. 1.292
25. 61.5
26. 66
27. 17
28. 45
29. 135.25
30. 113.6
31. 46.34
32. 38.5
33. 517.8
34. 96.95
35. 92.85
36. 270.4

## Year 6 Arithmetic Quiz 5

## Add and Subtract Decimal Numbers

Some addition and subtraction will be done mentally, some using a formal columnar method. When the columnar method is used, the numbers must be lined up correctly.
$4.7+0.6=5.3$
$1.7+0.08=1.78$
$7.2+1.94$
Line up the two numbers using the columnar method and add.

|  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | 7 | .2 |  |  |
|  | + | 1 | . | 9 | 4 |
|  |  | 9 | . | 1 | 4 |
|  |  | 1 |  |  |  |

## Multiply and divide by 10, 100 and 1000, including decimals

When multiplying by 10,100 and 1000 the number increases and the digits move to a new place value 1,2 or 3 places accordingly.

When dividing by 10, 100 and 1000 the number decreases and the digits move to a new place value 1,2 or 3 places accordingly.
$3.4 \times 10=34$
$3.56 \times 100=356$
$0.984 \times 1000=984$
$67 \div 10=6.7$
$35.8 \div 100=0.358$
$452 \div 1000=0.452$

## Percentages of amounts

A percentage is a part out of 100 . So $50 \%$ is 50 parts of an amount out of 100 parts. $50 \%$ is equivalent to one half.
$25 \%$ is 25 parts of an amount out of 100 parts. $25 \%$ is equivalent to one quarter.
$10 \%$ is 10 parts out of 100 , which is equivalent to 1 part out of 10 .
$10 \%$ of $80=8$
$20 \%$ of $80=16$ (because $20 \%$ is twice $10 \%$ )
$25 \%$ of $80=20$ (because $25 \%$ is one quarter)
$5 \%$ of $80=4$ (because $5 \%$ is half $10 \%$ )
$35 \%$ of $80=28$ (because $35 \%$ is $25 \%+10 \%$ or $10 \% \times 3+5 \%$ )

