

CHANGING SUBJECT OF A FORMULA

Answer all of these questions. Remember to show your working out in all questions.

MAIN QUESTIONS

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|-----|-------------------|--|---------|-----|---------------------|--|----------|
| 1. | $x + 5 = 12$ | | $x = 7$ | 2. | $y - 3 = 8$ | | $y = 11$ |
| 3. | $2a = 16$ | | $a = 8$ | 4. | $b/4 = 3$ | | $b = 12$ |
| 5. | $3c + 2 = 14$ | | $c = 4$ | 6. | $4d - 5 = 15$ | | $d = 5$ |
| 7. | $e/2 + 3 = 7$ | | $e = 8$ | 8. | $2f - 3 = 5f + 6$ | | $f = -3$ |
| 9. | $g + 4 = 2g - 1$ | | $g = 5$ | 10. | $3h/2 = 9$ | | $h = 6$ |
| 11. | $2i + 3 = 4i - 7$ | | $i = 5$ | 12. | $j/3 - 2 = 4$ | | $j = 18$ |
| 13. | $5k - 3 = 2k + 9$ | | $k = 4$ | 14. | $3m/4 + 2 = 8$ | | $m = 8$ |
| 15. | $2n + 5 = 3n - 2$ | | $n = 7$ | 16. | $p/2 - 3 = p/4 + 1$ | | $p = 16$ |

MASTER QUESTIONS



- M1.** The formula for the area of a triangle is $A = (bh)/2$. Make h the subject. | $h = 2A/b$
- M2.** The cost C of hiring a car is £25 per day plus 15p per mile. Write a formula for C in terms of d (days) and m (miles), then make m the subject. | $m = (C - 25d)/0.15$

M3. The perimeter P of a rectangle is given by $P = 2(l + w)$. Make w the subject. | $w = (P - 2l)/2$

M4. A taxi charges £3 flag fall plus £1.50 per kilometre. Write a formula for the total cost T in terms of distance d , then make d the subject. | $d = (T - 3)/1.5$