

# CHANGING SUBJECT OF A FORMULA

## SQUARES

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

### MAIN QUESTIONS

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|-----|-------------------|--|----------------------------|-----|-------------------|--|----------------------------|
| 1.  | $x^2 = 16$        |  | $x = \pm 4$                | 2.  | $y^2 = 25$        |  | $y = \pm 5$                |
| 3.  | $2x^2 = 18$       |  | $x = \pm 3$                | 4.  | $3y^2 = 27$       |  | $y = \pm 3$                |
| 5.  | $x^2 + 4 = 20$    |  | $x = \pm 4$                | 6.  | $y^2 - 9 = 16$    |  | $y = \pm 5$                |
| 7.  | $5x^2 = 125$      |  | $x = \pm 5$                | 8.  | $4y^2 = 64$       |  | $y = \pm 4$                |
| 9.  | $x^2/2 = 8$       |  | $x = \pm 4$                | 10. | $y^2/3 = 12$      |  | $y = \pm 6$                |
| 11. | $(x + 1)^2 = 9$   |  | $x = 2 \text{ or } x = -4$ | 12. | $(y - 2)^2 = 16$  |  | $y = 6 \text{ or } y = -2$ |
| 13. | $2(x + 3)^2 = 32$ |  | $x = 1 \text{ or } x = -7$ | 14. | $3(y - 1)^2 = 27$ |  | $y = 4 \text{ or } y = -2$ |
| 15. | $(2x)^2 = 64$     |  | $x = \pm 4$                | 16. | $(3y)^2 = 81$     |  | $y = \pm 3$                |

### MASTER QUESTIONS



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|-----|--|--|----------|
| M1. | The area of a square is $49\text{cm}^2$ . Find the length of one side. |  | 7cm      |
| M2. | A number squared is 144. What is the number?                           |  | $\pm 12$ |

- M3.** The square of a number plus 7 equals 32. Find the number. |  $\pm 5$
- M4.** A square has an area of  $81\text{m}^2$ . Find its perimeter. | 36m
- M5.** The product of a number and its square is 64. Find the number. | 4