

Name:

Exam Style Questions

Equations:  $x$  squared



Equipment needed: Calculator, pen

### Guidance

1. Read each question carefully before you begin answering it.
2. Check your answers seem right.
3. Always show your workings

Video Tutorial

[www.corbettmaths.com/contents](http://www.corbettmaths.com/contents)

Video 116a



Answers and Video Solutions



1. Solve  $x^2 = 9$



x = ..... Or x = .....  
(2)

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2. Solve  $x^2 = 100$



.....  
(2)

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3. Solve  $x^2 = 81$



.....  
(2)

4. Solve  $x^2 = 1$



.....  
(2)

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5. Solve  $x^2 = 400$



.....  
(2)

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6. Matt says that the only answer to  $x^2 = 4$  is  $x = 2$



Explain why Matt is wrong.

.....  
.....  
(1)

7. Solve  $x^2 = 225$



.....  
(2)

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8. Solve  $x^2 = 1444$



.....  
(2)

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9. Solve  $x^2 = 2.89$



.....  
(2)

10. Solve  $x^2 + 7 = 32$



.....  
(2)

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11. Solve  $x^2 - 2 = 119$



.....  
(2)

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12. Solve  $x^2 - 45 = 279$



.....  
(2)

13. The equation  $x^2 = k$  has exactly 1 solution.



Write down the value of  $k$ .

$k = \dots\dots\dots$   
(1)

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14. Solve  $2x^2 = 50$



$\dots\dots\dots$   
(2)

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15. Solve  $4x^2 = 36$



$\dots\dots\dots$   
(2)

16. Solve  $5x^2 = 180$



.....  
(2)

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17. Solve  $3x^2 = 192$



.....  
(2)

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18. The area of a square is  $169\text{cm}^2$   
Walter says that the length of each side is  $13\text{cm}$  or  $-13\text{cm}$



Explain why Walter is incorrect.

.....  
.....  
(1)

19. Solve  $(x + 9)^2 = 256$



.....  
**(2)**

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20. Solve  $(x - 1)^2 = 100$



.....  
**(2)**