

LESSON
9-7

Practice B
Solving Quadratic Equations by Using Square Roots

Solve using square roots. Check your answer.

1. $x^2 = 81$

$x = \pm\sqrt{81}$

$x = \pm$ _____

The solutions are _____ and _____.

2. $x^2 = 100$

$x = \pm\sqrt{\quad}$

$x = \pm$ _____

The solutions are _____ and _____.

3. $x^2 = 225$

$x = \pm\sqrt{\quad}$

$x =$ _____

4. $441 = x^2$

$\pm\sqrt{\quad} = x$

_____ = x

5. $x^2 = -400$

6. $3x^2 = 108$

7. $100 = 4x^2$

8. $x^2 + 7 = 71$

9. $49x^2 - 64 = 0$

10. $-2x^2 = -162$

11. $9x^2 + 100 = 0$

12. $0 = 81x^2 - 121$

13. $100x^2 = 25$

14. $100x^2 = 121$

Solve. Round to the nearest hundredth.

15. $8x^2 = 56$

16. $5 - x^2 = 20$

17. $x^2 + 35 = 105$

18. The height of a skydiver jumping out of an airplane is given by $h = -16t^2 + 3200$. How long will it take the skydiver to reach the ground? Round to the nearest tenth of a second.

19. The height of a triangle is twice the length of its base. The area of the triangle is 50 m^2 . Find the height and base to the nearest tenth of a meter.

20. The height of an acorn falling out of a tree is given by $h = -16t^2 + b$. If an acorn takes 1 second to fall to the ground. What is the value of b ?