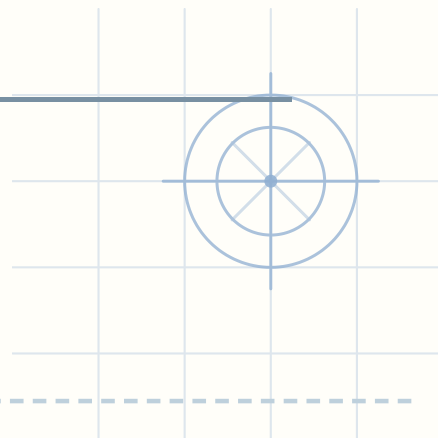


Solve by square roots — Square and shifted forms

Name: _____

Date: _____

Solve each equation by taking square roots.



1 $4x^2 = 324$ $x = \underline{\hspace{1cm}}$ or $x = \underline{\hspace{1cm}}$

2 $(x + 6)^2 = 4$ $x = \underline{\hspace{1cm}}$ or $x = \underline{\hspace{1cm}}$

3 $x^2 = 100$ $x = \underline{\hspace{1cm}}$ or $x = \underline{\hspace{1cm}}$

4 $(x - 5)^2 = 36$ $x = \underline{\hspace{1cm}}$ or $x = \underline{\hspace{1cm}}$

5 $3x^2 = 363$ $x = \underline{\hspace{1cm}}$ or $x = \underline{\hspace{1cm}}$

6 $(x + 4)^2 = 16$ $x = \underline{\hspace{1cm}}$ or $x = \underline{\hspace{1cm}}$

7 $(x + 8)^2 = 100$ $x = \underline{\hspace{1cm}}$ or $x = \underline{\hspace{1cm}}$

8 $(x + 9)^2 = 49$ $x = \underline{\hspace{1cm}}$ or $x = \underline{\hspace{1cm}}$

9 $x^2 = 81$ $x = \underline{\hspace{1cm}}$ or $x = \underline{\hspace{1cm}}$

10 $x^2 = 25$ $x = \underline{\hspace{1cm}}$ or $x = \underline{\hspace{1cm}}$



Solve by square roots · Square and shifted forms — Answer key

1. $4x^2 = 324 \rightarrow x = -9$ or $x = 9$

5. $3x^2 = 363 \rightarrow x = -11$ or $x = 11$

9. $x^2 = 81 \rightarrow x = -9$ or $x = 9$

2. $(x + 6)^2 = 4 \rightarrow x = -8$ or $x = -4$

6. $(x + 4)^2 = 16 \rightarrow x = -8$ or $x = 0$

10. $x^2 = 25 \rightarrow x = -5$ or $x = 5$

3. $x^2 = 100 \rightarrow x = -10$ or $x = 10$

7. $(x + 8)^2 = 100 \rightarrow x = -18$ or $x = 2$

4. $(x - 5)^2 = 36 \rightarrow x = -1$ or $x = 11$

8. $(x + 9)^2 = 49 \rightarrow x = -16$ or $x = -2$

