

Difficulty level: Advanced

1. Find the value of x such that $\sqrt{8-20x} - 6 = 0$.

- ☐ $-\frac{7}{5}$
- ☐ $\frac{1}{10}$
- ☐ -560
- ☐ $-\frac{1}{10}$

2. Find the value of x such that $\sqrt{10-19x} - 10 = 0$.

- ☐ $\frac{90}{19}$
- ☐ -1710
- ☐ 0
- ☐ $-\frac{90}{19}$

3. Find the value of x such that $\sqrt{14x+15} - 20 = 0$.

- ☐ $\frac{55}{2}$
- ☐ $\frac{5}{14}$
- ☐ $\frac{415}{14}$
- ☐ 5390

4. Solve $\sqrt{14-23u} - 5 = 0$ for u .

- ☐ $-\frac{9}{23}$
- ☐ $-\frac{11}{23}$
- ☐ $\frac{9}{23}$
- ☐ -253

5. Calculate the value of q such that $\sqrt{7-18q} - 3 = 0$.

- ☐ -36
- ☐ $-\frac{1}{9}$
- ☐ $\frac{2}{9}$
- ☐ $-\frac{8}{9}$

6. Find the value of x such that $\sqrt{17x+18} - 22 = 0$.

- ☐ $\frac{466}{17}$
- ☐ 7922
- ☐ $\frac{4}{17}$
- ☐ $\frac{502}{17}$

7. What is the value of s such that

$$\sqrt{4 - 14s} - 3 = 0?$$

☐ -70

☐ $\frac{1}{14}$

☐ $-\frac{5}{14}$

☐ $-\frac{13}{14}$

8. Solve the equation

$$\sqrt{6x + 13} - 8 = 0.$$

☐ $-\frac{5}{6}$

☐ 306

☐ $\frac{77}{6}$

☐ $\frac{17}{2}$

9. Solve $\sqrt{17 - 9x} - 17 = 0$ for x .

☐ $-\frac{272}{9}$

☐ $\frac{272}{9}$

☐ 0

☐ -2448

10. Solve the equation

$$\sqrt{17 - 10m} - 8 = 0.$$

☐ -470

☐ $-\frac{9}{10}$

☐ $-\frac{47}{10}$

☐ $\frac{9}{10}$

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11. Calculate the value of w such that

$$\sqrt{7 - 14w} - 10 = 0.$$

- ☐ -1302
- ☐ $-\frac{107}{14}$
- ☐ $-\frac{93}{14}$
- ☐ $-\frac{3}{14}$

12. Find the value of x such that

$$\sqrt{12 - 16x} - 8 = 0.$$

- ☐ $-\frac{13}{4}$
- ☐ -832
- ☐ $-\frac{1}{4}$
- ☐ $\frac{1}{4}$

13. Solve $\sqrt{21y + 14} - 10 = 0$ for y .

- ☐ 1806
- ☐ $-\frac{86}{21}$
- ☐ $\frac{86}{21}$
- ☐ $-\frac{4}{21}$

14. Find the value of q such that

$$\sqrt{11 - 8q} - 11 = 0.$$

- ☐ $-\frac{55}{4}$
- ☐ 0
- ☐ -880
- ☐ $\frac{55}{4}$

15. What is the value of x such that

$$\sqrt{15x+6} - 18 = 0?$$

- ☐ $\frac{106}{5}$
- ☐ $\frac{4}{5}$
- ☐ 4770
- ☐ $-\frac{106}{5}$

16. What is the value of a such that

$$\sqrt{6a+20} - 13 = 0?$$

- ☐ $-\frac{7}{6}$
- ☐ $\frac{149}{6}$
- ☐ 894
- ☐ $-\frac{149}{6}$

17. Find the value of x such that

$$\sqrt{17x+8} - 18 = 0.$$

- ☐ 5372
- ☐ $\frac{316}{17}$
- ☐ $\frac{332}{17}$
- ☐ $\frac{10}{17}$

18. Solve the equation

$$\sqrt{14x+19} - 6 = 0.$$

- ☐ $-\frac{13}{14}$
- ☐ $\frac{17}{14}$
- ☐ 238
- ☐ $-\frac{17}{14}$

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19. Calculate the value of x such that

$$\sqrt{18 - 8x} - 10 = 0.$$

- ☐ $-\frac{41}{4}$
- ☐ -656
- ☐ 1
- ☐ $-\frac{59}{4}$

20. Solve the equation

$$\sqrt{7z + 10} - 11 = 0.$$

- ☐ $\frac{111}{7}$
- ☐ 777
- ☐ $\frac{131}{7}$
- ☐ $\frac{1}{7}$