koolearn
新东方在线

Radical and rational equations

1. $\frac{2+\sqrt{2}}{2-\sqrt{2}}$

Which of the following is equivalent to the above expression?

A. -1

B. $1+\sqrt{2}$

C. $3+2\sqrt{2}$

D. $3+4\sqrt{2}$

2.n + 2 = $\sqrt{a-n}$
For what value of the constant a does the above equation have n=1 as the only solution?

3. $8\sqrt{p} - 2\sqrt{3} = \sqrt{3} + 3\sqrt{p}$
What value of pp is the solution to the above equation?

A. $\frac{3\sqrt{3}}{5}$

B. $\frac{9}{5}$

C. $\frac{9}{25}$

D. $\frac{27}{25}$

4.$k = \sqrt{10 + 3k} - 4$

What are all the possible values of k that satisfy the equation above?

A. -2 only
B. 2 only
C. -2 and -3
D. 2 and -2

5. $\sqrt{3p+13} = p+3$

What is the sum of the solutions to the above equation?

6. $\frac{3k}{k+4} - \frac{4k}{k-2} = -5$

What are the values of k that are solutions to the above equation?

A. -2 only
B. 5 only
C. -2 and 4
D. -2 and 5

7.$\sqrt{4x+20}=x+2$

What is the sum of the solutions to the above equation?

8. $\frac{11d+2}{d-8} = \frac{-3}{2}$

What is the solution to the equation above?

9. $\frac{a}{a+2}+\frac{a}{a+1}=\frac{3a+2}{(a+2)(a+1)}$

What is the sum of all the possible values for aa that satisfy the equation above?

koolearn
新东方在线

Thanks

新东方旗下官方网络课堂