

# 6-5

## Standardized Test Prep

### Solving Square Root and Other Radical Equations

#### Gridded Response

Solve each exercise and enter your answer in the grid provided.

1. What is the solution?  $\sqrt{2x - 4} - 3 = 1$

2. What is the solution?  $5x^{\frac{1}{2}} - 8 = 7$

3. What is the solution?  $\sqrt{2x - 6} = 3 - x$

4. What is the solution?  $\sqrt{5x - 3} = \sqrt{2x + 3}$

5. Kepler's Third Law of Orbital Motion states that the period  $P$  (in Earth years) it takes a planet to complete one orbit of the sun is a function of the distance  $d$  (in astronomical units, AU) from the planet to the sun. This relationship is  $P = d^{\frac{3}{2}}$ . If it takes Neptune 165 years to orbit the sun, what is the distance (in AU) of Neptune from the sun? Round your answer to two decimal places.

#### Answers

1. 

-	7	7	7	7
0	0	0	0	0
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9

2. 

-	7	7	7	7
0	0	0	0	0
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9

3. 

-	7	7	7	7
0	0	0	0	0
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9

4. 

-	7	7	7	7
0	0	0	0	0
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9

5. 

-	7	7	7	7
0	0	0	0	0
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9