

The deadline for all homework assignments is the one specified in Archie before 11:59 pm. As discussed in class, It must be correctly uploaded in order to be graded. Show all your work and justifications.

For Exercises 31–50, solve the equation.

31.  $\sqrt{2x - 4} = 6$  {20}

32.  $\sqrt{3x + 1} = 11$  {40}

34.  $\sqrt{2n + 29} + 3 = n$  {10}; The value 2 does not check  
 $\sqrt[4]{5y - 3} - \sqrt[4]{2y + 1} = 0$  { $\frac{4}{3}$ }

35.  $-4\sqrt[3]{2x - 5} + 6 = 10$  {2}

40.  $\sqrt{d + 4} - \sqrt{6 + 2d} = -1$  {5}; The value -3 does not check  
 43. a.  $m^{3/4} = 5$  { $5^{4/3}$ } b.  $m^{2/3} = 5$  { $\pm 5^{3/2}$ }

38.  $\sqrt[6]{y + 7} - \sqrt[6]{4y + 5} = 0$  { $\frac{2}{3}$ }

46.  $4(y - 3)^{3/4} = 20$  { $5^{4/3} + 3$ }

41.  $3 - \sqrt{y + 3} = \sqrt{2 - y}$  {-2, 11}

49.  $(2v + 7)^{1/3} - (v - 3)^{1/3} = 0$  {-10}

44. a.  $n^{5/6} = 3$  { $3^{6/5}$ } b.  $n^{4/5} = 3$  { $\pm 3^{5/4}$ }

33.  $\sqrt{m + 18} + 2 = m$

47.  $2p^{4/5} = \frac{1}{8}$  { $\pm \frac{1}{32}$ }

36.  $-3\sqrt[5]{4x - 1} + 2 = 8$  {-31}

50.  $(5u - 6)^{1/5} - (3u + 1)^{1/5} = 0$  { $\frac{7}{2}$ }

39.  $\sqrt{8 - p} - \sqrt{p + 5} = 1$  {-1}; The value 4 does not check

42.  $\sqrt{k - 2} = \sqrt{2k + 3} - 2$  {3, 11}

45.  $3(t + 2)^{5/6} = 21$  {7^{6/5} - 2}

48.  $5t^{2/3} = \frac{1}{5}$  { $\pm \frac{1}{125}$ }