

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 43–48, identify the least common denominator

43. $\frac{7}{6x^5yz^4}$ and $\frac{3}{20xy^2z^3}$ 46. $\frac{5y-7}{y(2y-5)(y+6)^4}$ and $\frac{6}{(2y-5)^3(y+6)^2}$

45. $\frac{2t+1}{(3t+4)^3(t-2)}$ and $\frac{4}{t(3t+4)^2(t-2)}$ 44. $\frac{12}{35b^4cd^3}$ and $\frac{8}{25b^2c^3d}$

47. $\frac{x+3}{x^2+20x+100}$ and $\frac{3}{2x^2+20x}$ 48. $\frac{z-4}{4z^2-20z+25}$ and $\frac{5}{12z^2-30z}$

For Exercises 49–60, add or subtract as indicated.

49. $\frac{m^2}{m+3} + \frac{6m+9}{m+3} = m+3$ 50. $\frac{n^2}{n+5} + \frac{7n+10}{n+5} = n+2$

52. $\frac{6}{25x} + \frac{7}{10x^4} = \frac{12x^3+35}{50x^4}$ 53. $\frac{9}{2x^2y^4} - \frac{11}{xy^5} = \frac{9y-22x}{2x^2y^5}$

55. $\frac{1}{x^2+xy} - \frac{2}{x^2-y^2} = -\frac{1}{x(x-y)}$ 56. $\frac{4}{4a^2-b^2} - \frac{1}{2a^2-ab} = \frac{1}{a(2a+b)}$

58. $\frac{5}{t^2} + \frac{4}{t+2} - \frac{3}{t} = \frac{t^2-t+10}{t^2(t+2)}$ 59. $\frac{3w}{w-4} + \frac{2w+4}{4-w} = 1$

51. $\frac{2}{9c} + \frac{7}{15c^3} = \frac{10c^2+21}{45c^3}$ 57. $\frac{5}{y} + \frac{2}{y+1} - \frac{6}{y^2} = \frac{7y^2-y-6}{y^2(y+1)}$

54. $\frac{-2}{3m^3n} - \frac{5}{m^2n^4} = -\frac{2n^3+15m}{3m^3n^4}$ 60. $\frac{2x-1}{x-7} + \frac{x+6}{7-x} = 1$