

**Probability
Answer Sheet**

Probability and Covid-19

1. $\frac{1}{40} = 0.025$

2. $\frac{8}{40} = 0.2$

3. $\frac{31}{40} = 0.775$

4. $\frac{39}{40} = 0.975$

5. $\frac{32}{40} = 0.8$

6. $\frac{9}{40} = 0.225$

7. $\frac{1396}{3246} \approx 0.430$

8. $\frac{909}{3246} \approx 0.280$

9. $\frac{552}{3246} \approx 0.170$

10. $\frac{357}{3246} \approx 0.110$

11. $\frac{10}{3246} \approx 0.003$

12. $\frac{22}{3246} \approx 0.007$

13. $\frac{1850}{3246} \approx 0.570$

14. $\frac{2337}{3246} \approx 0.720$

15. $\frac{2694}{3246} \approx 0.830$

16. $\frac{2889}{3246} \approx 0.890$

$$17. \frac{3236}{3246} \approx 0.997$$

$$18. \frac{1396}{3246} + \frac{357}{3246} - \frac{0}{3246} = \frac{1753}{3246} \approx 0.540$$

$$19. \frac{909}{3246} + \frac{552}{3246} - \frac{0}{3246} = \frac{1461}{3246} \approx 0.450$$

$$20. \frac{552}{3246} + \frac{10}{3246} - \frac{0}{3246} = \frac{562}{3246} \approx 0.173$$

$$21. \frac{41}{483} \approx 0.085$$

$$22. \frac{174}{483} \approx 0.360$$

$$23. \frac{268}{483} \approx 0.555$$

$$24. \frac{382}{483} \approx 0.791$$

$$25. \frac{101}{483} \approx 0.209$$

$$26. \frac{41+268}{483} = \frac{309}{483} \approx 0.640$$

$$27. \frac{483-174}{483} = \frac{309}{483} \approx 0.640$$

$$28. \frac{30}{483} \approx 0.062$$

$$29. \frac{41}{483} + \frac{382}{483} - \frac{30}{483} = \frac{393}{483} \approx 0.814$$

$$30. \frac{36}{483} \approx 0.075$$

$$31. \frac{174}{483} + \frac{101}{483} - \frac{36}{483} = \frac{239}{483} \approx 0.511$$

$$32. \frac{141}{261} \approx 0.540$$

$$33. \frac{120}{261} \approx 0.460$$

$$34. \frac{205}{261} \approx 0.785$$

$$35. \frac{56}{261} \approx 0.215$$

$$36. \frac{141}{261} + \frac{120}{261} - \frac{0}{261} = \frac{261}{261} = 1$$

$$37. \frac{0}{261} = 0$$

$$38. \frac{110}{261} \approx 0.421$$

$$39. \frac{141}{261} + \frac{205}{261} - \frac{110}{261} = \frac{236}{261} \approx 0.904$$

$$40. \frac{95}{261} \approx 0.364$$

$$41. \frac{120}{261} + \frac{205}{261} - \frac{95}{261} = \frac{230}{261} \approx 0.881$$

$$42. \frac{31}{261} \approx 0.119$$

$$43. \frac{141}{261} + \frac{56}{261} - \frac{31}{261} = \frac{166}{261} \approx 0.636$$

$$44. \frac{25}{261} \approx 0.096$$

$$45. \frac{120}{261} + \frac{56}{261} - \frac{25}{261} = \frac{151}{261} \approx 0.579$$

$$46. \frac{163}{578} \approx 0.282$$

$$47. \frac{158}{578} \approx 0.273$$

$$48. \frac{442}{578} \approx 0.765$$

$$49. \frac{136}{578} \approx 0.235$$

$$50. \frac{119}{578} + \frac{136}{578} - \frac{25}{578} = \frac{230}{578} \approx 0.398$$

$$51. \frac{163}{578} + \frac{136}{578} - \frac{30}{578} = \frac{269}{578} \approx 0.465$$

$$52. \frac{158}{578} + \frac{442}{578} - \frac{112}{578} = \frac{488}{578} \approx 0.844$$

$$53. \frac{138}{578} + \frac{442}{578} - \frac{103}{578} = \frac{477}{578} \approx 0.825$$

$$54. \frac{119}{578} + \frac{136}{578} - \frac{25}{578} = \frac{230}{578} \approx 0.398$$

$$55. \frac{163}{578} + \frac{136}{578} - \frac{30}{578} = \frac{269}{578} \approx 0.465$$

$$56. \frac{158}{578} + \frac{442}{578} - \frac{112}{578} = \frac{488}{578} \approx 0.844$$

$$57. \frac{138}{578} + \frac{442}{578} - \frac{103}{578} = \frac{477}{578} \approx 0.825$$

$$58. \frac{166}{398} \approx 0.417$$

$$59. \frac{127}{398} \approx 0.319$$

$$60. \frac{105}{398} \approx 0.264$$

$$61. \frac{307}{398} \approx 0.771$$

$$62. \frac{91}{398} \approx 0.229$$

$$63. \frac{127}{398} + \frac{307}{398} - \frac{97}{398} = \frac{337}{398} \approx 0.845$$

$$64. \frac{127}{398} + \frac{91}{398} - \frac{30}{398} = \frac{188}{398} \approx 0.472$$

Conditional Probability

1. $\frac{382}{483} \approx 0.791$

2. $\frac{30}{41} \approx 0.732$

3. $\frac{138}{174} \approx 0.793$

4. $\frac{214}{268} \approx 0.798$

5. Person aged 65 or older

6. Person aged 18 to 44 years

7. $\frac{101}{483} \approx 0.209$

8. $\frac{11}{41} \approx 0.268$

9. $\frac{36}{174} \approx 0.207$

10. $\frac{54}{268} \approx 0.201$

11. Person aged 18 to 44 years

12. Person aged 65 or older

13. $\frac{205}{261} \approx 0.785$

14. $\frac{110}{141} \approx 0.780$

15. $\frac{95}{120} \approx 0.792$

16. Women

17. Men

18. $\frac{56}{261} \approx 0.215$

19. Women

20. Men

$$21. \frac{442}{578} \approx 0.765$$

$$22. \frac{94}{119} \approx 0.790$$

$$23. \frac{133}{163} \approx 0.816$$

$$24. \frac{112}{158} \approx 0.709$$

$$25. \frac{103}{138} \approx 0.746$$

26. Black

27. Asian

$$28. \frac{136}{578} \approx 0.235$$

$$29. \frac{25}{119} \approx 0.210$$

$$30. \frac{30}{163} \approx 0.184$$

$$31. \frac{46}{158} \approx 0.291$$

$$32. \frac{35}{138} \approx 0.254$$

33. Asian

34. Black

$$35. \frac{4552}{10316} \approx 0.441$$

$$36. \frac{388}{557} \approx 0.697$$

$$37. \frac{460}{1061} \approx 0.434$$

$$38. \frac{2652}{6807} \approx 0.390$$

$$39. \frac{532}{945} \approx 0.563$$

$$40. \frac{2009}{10316} \approx 0.195$$

$$41. \frac{696}{10316} \approx 0.067$$

$$42. \frac{696+2009+2986+73}{10316} = \frac{5764}{10316} \approx 0.559$$

43. Asian

44. Hispanic

$$45. \frac{4552}{10316} \approx 0.441$$

$$46. \frac{2879}{6322} \approx 0.455$$

$$47. \frac{1673}{3994} \approx 0.419$$

$$48. \frac{2009}{10316} \approx 0.195$$

$$49. \frac{696+2009+2986+73}{10316} = \frac{5764}{10316} \approx 0.559$$

$$50. \frac{1199}{6322} \approx 0.189$$

$$51. \frac{810}{3994} \approx 0.203$$

$$52. \frac{431+1199+1767+46}{10316} = \frac{3443}{6322} \approx 0.545$$

$$53. \frac{265+810+1219+27}{10316} = \frac{2321}{3994} \approx 0.581$$

54. Female

55. Male

$$56. \frac{3135}{6005} \approx 0.522$$

$$57. \frac{314}{437} \approx 0.719$$

$$58. \frac{228}{481} \approx 0.474$$

$$59. \frac{1903}{3956} \approx 0.481$$

$$60. \frac{363}{562} \approx 0.646$$

$$61. \frac{960}{6005} \approx 0.160$$

$$62. \frac{405}{6005} \approx 0.067$$

$$63. \frac{405+960+1484+21}{6005} = \frac{2870}{6005} \approx 0.478$$

64. Asian

65. Black

$$66. \frac{3135}{6005} \approx 0.522$$

$$67. \frac{1947}{3707} \approx 0.525$$

$$68. \frac{1188}{2298} \approx 0.517$$

$$69. \frac{960}{6005} \approx 0.160$$

$$70. \frac{405+960+1484+21}{6005} = \frac{2870}{6005} \approx 0.478$$

$$71. \frac{587}{3707} \approx 0.158$$

$$72. \frac{373}{2298} \approx 0.162$$

$$73. \frac{240+587+919+14}{3707} = \frac{1760}{3707} \approx 0.475$$

$$74. \frac{166+373+564+7}{3707} = \frac{1110}{3707} \approx 0.299$$

75. Female

76. Male

77. Graduate

78. Undergraduate

79. K12 Public Schools

80. Graduate

81. K12 Public School

82. K12 Public School

$$83. \frac{55}{124} \approx 0.444$$

$$84. \frac{4}{8} = 0.500$$

$$85. \frac{49}{132} \approx 0.371$$

$$86. \frac{239}{683} \approx 0.350$$

87. American Indian

$$88. \frac{40}{9800} \approx 0.004$$

$$89. \frac{20}{200} \approx 0.100$$

$$90. \frac{180}{200} \approx 0.900$$

$$91. \frac{9760}{9800} \approx 0.996$$

$$92. \frac{1400}{70000} \approx 0.020$$

$$93. \frac{4200}{30000} \approx 0.140$$

$$94. \frac{25800}{30000} \approx 0.860$$

$$95. \frac{68600}{70000} \approx 0.980$$

$$96. \frac{4}{1070} \approx 0.004$$

$$97. \frac{0}{88} = 0$$

$$98. \frac{88}{88} = 1$$

$$99. \frac{1066}{1070} \approx 0.996$$

$$100. \frac{0}{80} = 0$$

$$101. \frac{3}{30} \approx 0.100$$

$$102. \frac{27}{30} \approx 0.900$$

$$103. \frac{80}{80} = 1$$