CHAPTER ONE: INTRO – EVALUATION OF EVIDENCE

1. Regarding the four-level hierarchy for classifying the strength of causal inferences from available evidence, Level 1 states that evidence is:
   A) sufficient  B) suggestive but not sufficient  C) inadequate  D) not sufficient at all

2. Mode of ___ refers to the process by which an agent causes disease.
   A) transference  B) mobility  C) action  D) movement

3. Of the 9 area in Austin Bradford Hill’s criteria, number 7 is:
   A) plausibility  B) consistency  C) biological gradient  D) coherence

4. Before ————, only 0.6 percent of cigarettes were filtered.
   A) 1930  B) 1950  C) 1970  D) 1980

5. Cigarette smoke contains more than ———— chemicals, including at least 69 known carcinogens.
   A) 7,000  B) 700  C) 500  D) 300

6. The ———— provides that premarket review of certain tobacco products by FDA is required before the products may be marketed.
   A) tobacco control act  B) stomp tobacco act  C) nicotine act  D) smoking advertisement act

CHAPTER TWO: THE CHANGING CIGARETTE

7. Mainstream smoke (from the butt end) contains considerably more cyanide than sidestream smoke (from the opposite end) does.
   A) true  B) false

8. The tobacco leaf contains many alkaloid chemicals; ———— is the most abundant.
   A) piperidine  B) isoxazole  C) nicotine  D) tropane

9. (———)-nitrrosamines are a class of chemical compounds containing a nitroso group attached to an amine nitrogen.
   A) o  B) n  C) x  D) r

10. ————s are chemical compounds with two or more condensed aromatic and other cyclic rings of carbon and hydrogen atoms.
    A) jke  B) vtr  C) pah  D) wsa

11. ———— amines (HCAs) are a class of chemical compounds that contain at least one cyclic ring and an amine-substituted ring.
    A) heterogeneous  B) helical  C) heterocyclic  D) hyperactive

12. In addition to lamina, cigarette filler often contains puffed or expanded tobacco, tobacco stems, humectants, and various flavor additives.
    A) true  B) false

13. Cigarette smoking is a risk factor for bladder cancer. The increased mutagenicity of smokers’ urine was first shown in:
    A) 1967  B) 1957  C) 1987  D) 1977

14. In human studies, smoking was shown to increase the frequency of HPRT mutants in peripheral blood lymphocytes by approximately:
    A) 30%  B) 18%  C) 50%  D) 3%

15. Study findings indicate that cytotoxicity may play a role in several tobacco-related chronic diseases, including emphysema.
    A) true  B) false

16. In one study, researchers observed nonneoplastic tumors throughout the ———— of animals exposed to smoke.
    A) liver  B) respiratory tract  C) skeletal system  D) brain

17. Researchers demonstrated fetotoxicity from cigarette smoke exposure by reporting ———— in rats and mice exposed during gestation.
    A) increased nausea  B) reduced fetal weight  C) increased fetal weight  D) increased mortality

18. It has been shown that direct nicotine administration to humans or animals ———— body weight and caloric intake.
    A) slightly increases  B) sharply increases  C) decreases  D) has no effect on

CHAPTER THREE: CHEMISTRY AND TOXICOLOGY

19. It has been shown that direct nicotine administration to humans or animals ———— body weight and caloric intake.
    A) slightly increases  B) sharply increases  C) decreases  D) has no effect on

20. Researchers have used the ———— Test for Nicotine Dependence (FTND) to determine the degree of dependence in smokers.
    A) Fairview  B) Fenabi  C) Ferrovie  D) Fagerström
21. Tobacco products contain more than _______ chemicals, some of which could contribute to dependence.
   A 4,000  B 400  C 40  D 4

22. Oral use of smokeless tobacco products results in high venous concentrations of nicotine _______ to those for use of cigarettes.
   A equal  B slightly less  C much less  D greater

23. In behavioral psychology, a stimulus is considered _______ if it increases a response or behavior resulting in obtaining that stimulus.
   A destructive  B weakening  C unique  D reinforcing

24. _______ refers to processes by which smoking or nicotine reduces aversive states, such as pain, craving, difficulty concentrating, etc.
   A Positive reinforcement  B Negative reinforcement  C Stable reinforcement  D Cyclical reinforcement

25. Smoking cessation leads to an aversive withdrawal syndrome lasting _______ weeks after cessation.
   A around 3 days  B one to four  C eight to ten  D fifteen to thirty three

26. Most estimates suggest that incidence of major depressive disorder among smokers is approximately _______ that among nonsmokers.
   A 2 to 3 times  B 5 times  C 7 times  D equal to

27. More than _______ percent of patients with schizophrenia smoke compared with 20-30 percent of the general population
   A 50-60  B 70  C 80-90  D 25-35

28. Varenicline was approved by FDA as a treatment for smoking cessation in:

29. There is strong evidence from studies of twins that smoking initiation and nicotine dependence are influenced by heritable factors.
   A True  B False

30. One study found that the most susceptible youth lose autonomy over tobacco within _______ days of first inhaling from a cigarette.
   A 14  B one or two  C 30  D 45

31. The Yale Longitudinal High-Risk Study revealed _______ association of nicotine dependence with anxiety disorder, as well as others.
   A no  B a significant  C a very weak  D a reverse

32. One US study found that for racial and ethnic groups, the lowest prevalence of smoking was among _______ (9.6 percent).
   A Asians  B African Americans  C Alaska natives  D Latinos

33. It is estimated that _______ of all cigarettes sold in the US are consumed by people with mental illnesses or substance abuse disorders.
   A 5-7 percent  B 12 percent  C 28 percent  D nearly one half

34. Every year _______ of daily smokers in the US stop smoking for 24 hours, but only 5 percent or less achieve long-lasting abstinence.
   A 20 percent  B 32-35 percent  C about 45 percent  D 5 percent

35. One study found that roughly _______ percent of those who have ever smoked eventually become long-term former smokers.
   A 30  B 15  C 50  D 85

36. Regarding relapse to smoking, on average, a second lapse occurs within _______ of the first lapse.
   A 3 days  B 1 week  C 1 month  D 24 hours

37. The metabolic activation of carcinogens results in formation of _______ adducts, which are absolutely central to the carcinogenic process.
   A DNA  B enzyme  C cytochrome  D plastid

38. Researchers have used the _______ (NPRO) test to compare endogenous nitrosation in smokers and nonsmokers.
   A N-nitrosoprolidine  B N-nitrosoprenaline Os  C N-nitropiridoline  D N-nitropirelliosification

39. Ethylene oxide reacts directly with DNA to form _______ -(2-hydroxyethyl)guanine and other adducts.
   A 5  B 7  C 3  D 15

40. _______ , encoded by CYP genes, are microsomal enzymes that catalyze the oxidation of many of the carcinogens in cigarette smoke.
   A S-563s  B R-553s  C P-450s  D D-280s
41. Researchers believe that aromatic amines in tobacco smoke contribute to smoking-related ——— cancer.
   A pancreatic  B colon  C bladder  D thyroid

42. Researchers have established cigarette smoking as a major cause of lung cancer: more than ——— of cases are attributable to smoking.
   A 50 percent  B 65 percent  C 73 percent  D 85 percent

43. The GSTM——— enzyme is important in detoxifying carcinogens.
   A 1  B 2  C 3  D 4

44. Tobacco smoke is lacking in reactive oxygen species that can oxidize DNA bases.
   A True  B False

45. The GSTM——— enzyme is important in detoxifying carcinogens.
   A 1  B 2  C 3  D 4

46. Tobacco smoke is lacking in reactive oxygen species that can oxidize DNA bases.
   A True  B False

47. DNA polymerases are key players in mutation induction, introducing mutations during cellular: replication  B osmosis  C diffusion  D respiration

48. The most frequently inactivated tumor-suppressor gene in lung cancer is:
   A IU89  B TP53  C RR34  D BN21

49. ——— gene expression is common in lung cancer.
   A Slight decreased  B Increased  C Marked decreased  D An absence of

50. In oral cancers, it is shown that the TP53 mutation has ——— in the prevalence of mutations among heavy smokers versus nonsmokers.
   A a seven fold increase  B an almost 4 fold increase  C a 2 fold increase  D an eight fold increase

51. Apoptosis was first described in 1972. The term “apoptosis” is from the Greek word for “———.”
   A breaking down  B bringing together  C falling off  D building around the center

52. Activation of the RAS pathway sends a strong anti-apoptotic signal, and the constitutive activation of RAS can ——— normal cells.
   A dissolve  B speed the duplication of  C do no damage to  D transform

   A increases  B slightly decreases  C markedly decreases  D has no effect on

54. COX-2 over-expression in lung cancer is associated with tumor angiogenesis and survival and proliferation of tumor cells.
   A True  B False

55. More than ——— genes are inactivated by gene promoter hypermethylation in lung cancer.
   A 12  B 22  C 42  D 50

56. A hallmark of the ——— cell is the ability to disrupt the tightly regulated cell-cycle control and enable the cell to bypass checkpoints.
   A cardiac muscle  B pulmonary tissue  C neoplastic  D hepatic tissue

57. Smoking and exposure to asbestos interact synergistically to increase the risk for lung cancer.
   A True  B False

58. In a US CDC 2008 report, smoking accounted for 33 percent of all deaths from CVD in persons older than ——— years of age.
   A 20  B 27  C 35  D 54

59. The risks of MI and death from CHD are ——— among former smokers than among continuing smokers in many studies.
   A slightly higher  B lower  C much higher  D about equal

60. The ——— study is a case-control investigation of acute MI in 52 countries around the world, including North and South America.
   A ALLHEART  B INTERHEART  C PERIHEART  D BIGHEART

CHAPTER SIX: CARDIOVASCULAR DISEASES

61. In a US CDC 2008 report, smoking accounted for 33 percent of all deaths from CVD in persons older than ——— years of age.
   A 20  B 27  C 35  D 54

62. The risks of MI and death from CHD are ——— among former smokers than among continuing smokers in many studies.
   A slightly higher  B lower  C much higher  D about equal

63. The ——— study is a case-control investigation of acute MI in 52 countries around the world, including North and South America.
   A ALLHEART  B INTERHEART  C PERIHEART  D BIGHEART
61. In regular smokers, carboxyhemoglobin levels average about ——— percent, compared with 10 percent or higher in heavy smokers.
A 8 B 5 C 12 D 15

62. In one study, intravenous nicotine, nicotine nasal spray, and nicotine chewing gum all increased the heart rate up to ——— per minute.
A 2 beats B 7 beats C 10 to 15 beats D 21 beats

63. Smoking impairs the ability of the endothelium to resist thrombosis.
A True B False

64. Administration of vitamin ——— reverses the impairment of endothelium-mediated vasodilation in smokers.
A D B K C A D C

65. Studies have reported that sudden cardiac death is ——— times higher in smokers than in nonsmokers.
A 2 B 1.5 C 2.5 D 3.5

66. One study showed that the albumin excretion rate was ——— times higher in smokers than in nonsmokers, after statistical corrections.
A 2.8 B 2.1 C 1.5 D 1.3

67. Cigarette smoking is thought to raise the LDLc to HDLc ratio by ——— percent.
A 5 B 10 to 12 C 15 to 20 D 35

68. Natural respiratory defenses are critical because of the substantial volume of air inhaled daily: about ——— liters per day.
A 75 B 100 C 1,000 D 10,000

69. Catalase is a tetrameric ——— that undergoes oxidation and reduction at its active site in the presence of H2O2.
A eosinophil B hemoprotein C platelet D carbohydrate

70. ——— trapping, a technique in which a radical reacts with a more stable molecule, can be used to measure oxidants in biologic systems.
A Spin B Turn C Flip D Reverse

71. In one study, intravenous nicotine, nicotine nasal spray, and nicotine chewing gum all increased the heart rate up to ——— per minute.
A 2 beats B 7 beats C 10 to 15 beats D 21 beats

72. In regular smokers, carboxyhemoglobin levels average about ——— percent, compared with 10 percent or higher in heavy smokers.
A 8 B 5 C 12 D 15

73. Smoking impairs the ability of the endothelium to resist thrombosis.
A True B False

74. Administration of vitamin ——— reverses the impairment of endothelium-mediated vasodilation in smokers.
A D B K C A D C

75. Studies have reported that sudden cardiac death is ——— times higher in smokers than in nonsmokers.
A 2 B 1.5 C 2.5 D 3.5

76. One study showed that the albumin excretion rate was ——— times higher in smokers than in nonsmokers, after statistical corrections.
A 2.8 B 2.1 C 1.5 D 1.3

77. Cigarette smoking is thought to raise the LDLc to HDLc ratio by ——— percent.
A 5 B 10 to 12 C 15 to 20 D 35

78. Natural respiratory defenses are critical because of the substantial volume of air inhaled daily: about ——— liters per day.
A 75 B 100 C 1,000 D 10,000

79. Catalase is a tetrameric ——— that undergoes oxidation and reduction at its active site in the presence of H2O2.
A eosinophil B hemoprotein C platelet D carbohydrate

80. ——— the major thiol antioxidant in the lungs, rapidly decreases in the lung tissue of rats after exposure to cigarette smoke.
A TTR B GSH C RUI D BEW
81. After just one cigarette has been smoked, nitrite, nitrate, and cysteine ——— in peripheral blood.

A become slightly elevated  B greatly increase  C decrease  D levels are maintained

82. In animal models, markers of oxidative stress generally increase during the first ——— hours after exposure to cigarette smoke.

A 2  B 4  C 6  D 17

83. ——— refers to cellular death, which is organized and noninflammatory.

A Necrosis  B Flat-lining  C Lytic adhesion  D Apoptosis

84. Inflammatory cells linked to the development of emphysema include neutrophils, macrophages, and lymphocytes.

A True  B False

85. ——— from exposure to tobacco smoke has a role in the pathogenetic process leading to chronic obstructive pulmonary disease.

A Mental stress  B Oxidative stress  C Muscular stress  D Neural stress

CHAPTER EIGHT: REPRODUCTIVE AND DEVELOPMENTAL EFFECTS

88. Tobacco smoke contains ——— compounds, some of which are known to have toxic effects on reproductive health.

A between 100 and 200  B almost 95  C nearly 800  D thousands of

89. The PCASRM has estimated that ——— percent of infertility may be attributable to smoking.

A 5  B 8  C 10  D 13

90. Epidemiologic studies have consistently reported a(n) ——— risk of placenta previa among smokers.

A increased  B mildly reduced  C unaffected  D greatly reduced


A 8.4  B 12.3  C 3.2  D 1.2

92. The highest quality studies indicate birth weight decrements of 15 to ——— g from exposure to secondhand smoke.

A 35  B 50  C 100  D 245

93. Many studies have found a slightly increased risk of approximately ——— for stillbirth or neonatal mortality associated with smoking.

A 20 to 30 percent  B 8 to 10 percent  C 5 percent  D 44 percent

94. ——— studies show that smokers have lower circulating levels of estriol and estradiol than do nonsmokers.

A Very few  B No  C Several  D Only Asian-based

95. The ——— is an in vivo target of cigarette smoke and its components.

A pancreas  B urinary bladder  C oviduct  D distal small bowel

96. The fetus of a smoker develops under conditions of ——— partial pressure of O2.

A slightly increased  B greatly increased  C an unaffected  D reduced

97. Smoking acutely increases the heart rate and blood pressure of smokers, particularly after ——— smoking.

A a period of abstinence from  B a long period of  C completely quitting  D changing cigarette brands in

98. A study of more than 5,000 participants found that smokers tended to have a lower mean diastolic blood pressure of ——— of mercury.

A 8 to10 millimeters  B 1 to 3 millimeters  C 5 to 7 millimeters  D 8 to 9 millimeters

99. A large study, with 67 pregnant smokers, found a significant increase of ——— in maternal heart rate immediately after smoking.

A 3 percent  B only 1 percent  C 6 percent  D 4 to 5 percent

100. Regarding most studies for maternal blood pressure, increases of less than ——— percent were observed.

A 12  B 15  C 9  D 5
101. A reactive NST (—— nonstress test) is a sign of fetal well-being.
A nominal  B nosocomial  C neural  D noninvasive

102. The embryo is most easily disturbed during the organogenesis period, from day 15 to day ——— after conception.
A 20  B 35  C 45  D 60

103. Epidemiologic studies show that offspring of maternal smokers have abnormal lung function.
A True  B False

104. ———, smoking appears to have immunosuppressive effects.
A In 100 percent of cases  B In general  C In no studies  D In very few studies

105. ——— is formed as a by-product of combustion and is thus present in tobacco smoke.
A CO2  B H  C CO  D H2O2

106. The dose of the toxin, CO, per cigarette is ——— times the dose of nicotine.
A 5  B 12  C 10 to 20  D 3

107. The binding of CO to hemoglobin is tenacious, with a half-life of ——— hours.
A five to six  B around two  C four  D over eleven

108. ———, the principal alkaloid in tobacco, is a major contributor to the addictive properties of smoking.
A Irritant bases  B Nicotine  C CO  D Tar

109. Regarding tobacco smoke studies, arsenic was detectable but not quantifiable (limit of quantitation = ——— ng per cigarette).
A 1.2  B 2.7  C 5.4  D 12.8

110. ——— metals can influence electron-exchange reactions and oxidative stress within cells.
A Interim  B Terminal  C Transition  D Alkaloid

111. Researchers have investigated ——— as the agent in cigarette smoke responsible for LBW in newborns of smokers.
A cadmium  B technetium  C promethium  D astatine

112. The most commonly observed effects of PAHs in animal studies are growth retardation and ———.
A anemia  B chronic elevated BP  C physical malformations  D fetal mortality

113. Cigarette smoke inhibits the growth of the chick chorioallantoic ——— (CAM).
A membrane  B mitosis  C melamine  D menthol

114. ——— of women who smoke during the first pregnancy also smoke during the second.
A One-half  B Two-thirds  C One-fifth  D One-fourth

115. The ——— Health Organization (WHO) has called tobacco use “the single most preventable cause of death in the world today”.
A Washington  B Willoughby  C World  D Warren

116. Smokers who quit after the age of ——— years continue to have excess risk for tobacco-related diseases.
A 25  B 32  C 37  D 44

117. If the population ceased smoking, this single behavior change would be tantamount to a vaccine against ——— of cancer deaths.
A one-eighth  B one-fifth  C one-fourth  D one-third

118. Data indicate that less than ——— percent of smokers are offered assistance in quitting annually.
A 45  B 55  C 30  D 62

119. The federal excise tax on cigarettes rose from $0.24 to ——— on April 1, 2009.
A $1.01  B $0.52  C $0.49  D $0.88

120. Both active and involuntary smoking are the cause of at least ——— types of cancer.
A 15  B 7  C 4  D 12
TOBACCO AND DISEASE COURSE POST-TEST ANSWER SHEET

Fill in each blank. There are two options to submit the post-test.

Option 1: Submit the post-test answers online at radunits.com on the course page under Step 3 for instant grading and emailed CE certificate. A password is required, which is found in your email receipt.

Option 2: Fax this answer sheet to us at 866-386-0472, or you may instead email a phone pic of the answer sheet to clark@radunits.com. Allow 2 days for grading, and we will email the CE certificate.

<table>
<thead>
<tr>
<th>First name:</th>
<th>Last name:</th>
<th>Email:</th>
<th>ARRT license number:</th>
<th>Florida techs only - enter state license number. All others enter N/A:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telephone:</td>
<td>Date:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When part of a group order or if the post-test is purchased under another name – enter the order number or purchaser’s name:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18</th>
<th>19</th>
<th>20</th>
<th>21</th>
<th>22</th>
<th>23</th>
<th>24</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>25</td>
<td>49</td>
<td>73</td>
<td>97</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>26</td>
<td>50</td>
<td>74</td>
<td>98</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>27</td>
<td>51</td>
<td>75</td>
<td>99</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>28</td>
<td>52</td>
<td>76</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>29</td>
<td>53</td>
<td>77</td>
<td>101</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>30</td>
<td>54</td>
<td>78</td>
<td>102</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>31</td>
<td>55</td>
<td>79</td>
<td>103</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>32</td>
<td>56</td>
<td>80</td>
<td>104</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>33</td>
<td>57</td>
<td>81</td>
<td>105</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>34</td>
<td>58</td>
<td>82</td>
<td>106</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>35</td>
<td>59</td>
<td>83</td>
<td>107</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>36</td>
<td>60</td>
<td>84</td>
<td>108</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>37</td>
<td>61</td>
<td>85</td>
<td>109</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>38</td>
<td>62</td>
<td>86</td>
<td>110</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>39</td>
<td>63</td>
<td>87</td>
<td>111</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>40</td>
<td>64</td>
<td>88</td>
<td>112</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>41</td>
<td>65</td>
<td>89</td>
<td>113</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>42</td>
<td>66</td>
<td>90</td>
<td>114</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>43</td>
<td>67</td>
<td>91</td>
<td>115</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>44</td>
<td>68</td>
<td>92</td>
<td>116</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>45</td>
<td>69</td>
<td>93</td>
<td>117</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>46</td>
<td>70</td>
<td>94</td>
<td>118</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>47</td>
<td>71</td>
<td>95</td>
<td>119</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>48</td>
<td>72</td>
<td>96</td>
<td>120</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>