

- ___ 12. What is the pitch of a 6 in 12 roof?
a. $\frac{1}{3}$ c. $\frac{1}{2}$
b. $\frac{1}{4}$ d. $\frac{1}{6}$
- ___ 13. What is the pitch of a 8 in 12 roof?
a. $\frac{1}{3}$ c. $\frac{1}{2}$
b. $\frac{1}{4}$ d. $\frac{1}{6}$
- ___ 14. What is the pitch of a 4 in 12 roof?
a. $\frac{1}{3}$ c. $\frac{1}{2}$
b. $\frac{1}{4}$ d. $\frac{1}{6}$
- ___ 15. The length of the rafter from the center of the ridge to outside edge of the wall is called the:
a. slope c. line length
b. pitch d. overall length
- ___ 16. The length of the rafter from the center of the ridge to outside edge of the wall plus the overhang is called the:
a. pitch c. line length
b. slope d. overall length
- ___ 17. Which type roof has only one sloping surface?
a. hip roof c. shed roof
b. gable roof d. gambrel roof
- ___ 18. Which type roof has only two sloping surfaces?
a. hip roof c. shed roof
b. gable roof d. gambrel roof
- ___ 19. Which type roof has four sloping surfaces that all slope from the ridge?
a. hip roof c. shed roof
b. gable roof d. gambrel roof
- ___ 20. Which type roof has four sloping surfaces and is used on two-story construction?
a. hip roof c. shed roof
b. gable roof d. gambrel roof
- ___ 21. Which type rafter runs at a right angle from the wall plate to the ridge?
a. common rafter c. hip rafter
b. jack rafter d. valley rafter
- ___ 22. Which type rafter runs from the plate to the ridge at a 45 degree angle and forms the support where two slopes of a roof meet?
a. common rafter c. hip rafter
b. jack rafter d. valley rafter
- ___ 23. Which type rafter runs diagonally from the plate to the ridge in the hollow formed by the intersection of two roof sections?
a. common rafter c. hip rafter
b. jack rafter d. valley rafter
- ___ 24. A notch cut on the underside of a rafter to fit the top plate. This cut is formed by a seat cut and a plumb cut.
a. groove c. plate cut
b. dado d. bird's mouth

- ___ 25. When making stick rafters, each one should be shortened at the ridge _____ the thickness of the ridge board.
- a. 3 times
 - b. 1/4
 - c. half
 - d. twice
- ___ 26. Joints in the ridge board should occur:
- a. anywhere
 - b. at the center of a rafter
 - c. to the left of the rafter
 - d. to the right of the rafter
- ___ 27. Which square has a rafter table located on it?
- a. combination square
 - b. carpenter's square
 - c. try square
 - d. speed square
- ___ 28. If the pitch of a roof is 1/4, what is the rise if the span is 40 feet?
- a. 120 inches
 - b. 12 inches
 - c. 10 ft
 - d. 120 ft
- ___ 29. If the pitch of a roof is 1/3, what is the rise if the span is 20 feet?
- a. 30 inches
 - b. 60 inches
 - c. 80 inches
 - d. 80 feet
- ___ 30. If the pitch of a roof is 1/6, what is the rise if the span is 50 feet?
- a. 300 inches
 - b. 10 feet
 - c. 100 feet
 - d. 100 inches
- ___ 31. What is the main trim member called that is attached to the ends of the rafters? It conceals the rafter ends, provides a finished appearance, and furnishes a surface to which guttering may be attached.
- a. purlin
 - b. fascia
 - c. chord
 - d. soffit
- ___ 32. _____ beams tie together two rafters on opposite sides of a roof. They provide bracing and stiffening to hold the ridge and rafters together.
- a. rafter
 - b. roof
 - c. collar
 - d. ridge
- ___ 33. A _____ is a framed structure projecting above a sloping roof surface and normally contains a window unit. Sometimes called a doghouse.
- a. projectile
 - b. window box
 - c. window extension
 - d. dormer
- ___ 34. The lowest member of a truss is called the:
- a. bottom chord
 - b. bottom tail
 - c. girder
 - d. valley
- ___ 35. A panel or bracket of either wood or metal attached to the corners and intersections of each member of a truss to add strength and stiffness is called a:
- a. girder
 - b. gusset
 - c. fascia
 - d. soffit
- ___ 36. _____ provides a nailing base for the roof covering and adds strength and rigidity to the frame.
- a. ceiling joists
 - b. the cornice
 - c. sheathing
 - d. shiplap

- ___ 50. The height of a standard residential door is:
a. 7' 2" c. 6' 9"
b. 7' 0" d. 6' 8"
- ___ 51. A person who designs and oversees the construction of a building is a/an:
a. contractor c. engineer
b. carpenter d. architect
- ___ 52. Temporary framework used to assist in locating corners when laying out a foundation is known as:
a. foundation corners c. batter boards
b. foundation benchmarks d. corner boards
- ___ 53. A _____ is a support base made of concrete that is poured directly into a trench on top of undisturbed soil to support the weight of a building.
a. foundation c. threshold
b. footing d. concrete base
- ___ 54. The footings should be:
a. wider than the wall c. same size as the wall
b. smaller than the wall d. even and uniform
- ___ 55. The purpose of screeding concrete is to:
a. have a perfectly smooth finish c. level the surface by removing excess concrete
b. leave a texture d. remove all the trash
- ___ 56. When cement, sand and gravel are mixed with water it is known as:
a. concrete c. mortar
b. cement d. grout
- ___ 57. When cement and sand are mixed with water it is known as:
a. concrete c. mortar
b. cement d. grout
- ___ 58. A sack of cement contains:
a. 1/2 cubic foot c. 1 1/2 cubic feet
b. 1 cubic foot d. 2 cubic feet
- ___ 59. The most common type of cement used around the world that is manufactured from limestone and clay is:
a. Portland cement c. Limestone cement
b. American cement d. Bentonite cement
- ___ 60. A sack of cement weighs:
a. 50 lbs. c. 94 lbs.
b. 75 lbs. d. 100 lbs.
- ___ 61. The common size of a cement block used in agricultural construction is:
a. 4" x 4" x 12" c. 6" x 6" x 16"
b. 8" x 8" x 16" d. 8" x 8" x 16"
- ___ 62. The most common size of a mortar joint is:
a. 3/8" c. 3/4"
b. 1/2" d. 7/8"

- ___ 63. When laying a concrete block wall start at:
a. the corner and work toward the center
b. any point you desire
c. the corners and work toward the center
d. the corner and work toward the other corner
- ___ 64. Each row of concrete blocks is called a/an:
a. layer
b. line
c. row
d. course
- ___ 65. In staking out a house, what is the next important thing to do after you have located the property lines?
a. erect batter boards
b. determine the location of the corners
c. lay cement blocks
d. dig footings
- ___ 66. The size of a modular brick is:
a. 4" x 3" x 8"
b. 4" x 2 2/3" x 8"
c. 3" x 3" x 8"
d. 2" x 3" x 8"
- ___ 67. How many modular bricks equal the volume of a standard cement block?
a. 8
b. 12
c. 16
d. 20
- ___ 68. When laying cement blocks, how should the mortar be applied?
a. cover the bed of the blocks completely
b. lay two separate strips down each end of the blocks
c. place a strip down the middle of the blocks
d. lay two separate strips down each side of the blocks
- ___ 69. A person that lays brick is called a:
a. apprentice
b. brick worker
c. journeyman
d. mason
- ___ 70. One cubic yard of concrete contains ___ cubic feet.
a. 9
b. 36
c. 27
d. 54
- ___ 71. The footing should be placed:
a. below the frost line
b. above the frost line
c. on the frost line
d. it doesn't matter
- ___ 72. A tool used for smoothing or indenting the surface of a mortar joint is called a:
a. jointer
b. trowel
c. scraper
d. smoothing tool
- ___ 73. A 1-2-3 mixture of concrete means:
a. one part sand, two parts gravel and 3 parts cement
b. one part gravel, two parts sand and 3 parts cement
c. one part cement, two parts sand and 3 parts gravel
d. one part cement, two parts gravel and 3 parts sand
- ___ 74. Smoothing or finishing concrete is called:
a. screeding
b. troweling
c. planing
d. edging

- _____ 75. An agreement between the builder and a city that specifies the type, quality and extent of construction to be done is a/an:
a. building code
b. building permit
c. ordinance
d. binder
- _____ 76. A section of land contains _____ acres.
a. 40
b. 80
c. 640
d. 160
- _____ 77. 1/4 section of land contains _____ acres.
a. 40
b. 80
c. 640
d. 160
- _____ 78. A township has _____ sections.
a. 24
b. 36
c. 48
d. 64
- _____ 79. A township has _____ acres.
a. 10,000
b. 15,000
c. 23,040
d. 43,560
- _____ 80. A township is:
a. 10 sq. miles
b. 15 sq. miles
c. 30 sq. miles
d. 36 sq. miles
- _____ 81. A section of land is:
a. 1 sq. mile
b. 5 sq. miles
c. 10 sq. miles
d. 40 sq. miles
- _____ 82. 1 mile is _____ feet.
a. 5,000
b. 5,280
c. 640
d. 750
- _____ 83. 1 rod is _____ feet.
a. 16.5
b. 20
c. 25
d. 50
- _____ 84. 1 chain is _____ feet
a. 10
b. 40
c. 66
d. 70
- _____ 85. 1 chain is _____ rods.
a. 10
b. 8
c. 6
d. 4
- _____ 86. 1 chain is _____ links.
a. 25
b. 50
c. 100
d. 120
- _____ 87. The main line in the rectangular survey system that runs east and west is called the:
a. Base Line
b. Principal Meridian
c. Township Line
d. Range Line

- ___ 88. The main line in the rectangular survey system that runs north and south is called the:
- Base Line
 - Principal Meridian
 - Township Line
 - Range Line
- ___ 89. Lines in the rectangular survey system that run east and west every 6 miles is called:
- Base Lines
 - Principal Meridians
 - Township Lines
 - Range Lines
- ___ 90. Lines in the rectangular survey system that run north and south every 6 miles is called:
- Base Lines
 - Principal Meridians
 - Township Lines
 - Range Lines
- ___ 91. _____ lines are the lines marking where the walls of the structure will be.
- Wall
 - Property
 - Building
 - Foundation
- ___ 92. The builder's level is also called a _____ level.
- dummy
 - transit
 - tripod
 - vertical
- ___ 93. Ground that slopes 4 feet in a 50 feet span, is said to have a _____% slope.
- 4
 - 6
 - 8
 - 10
- ___ 94. Before construction of a foundation or a slab for a building can begin, the carpenter must know:
- the type shingles that will be installed
 - where the structure will be located on the property
 - the type paint that will be used
 - the exact date of completion
- ___ 95. The point where a level-transit is located. It is a reference point such as a stake or paint mark directly below the center of the instrument.
- station mark
 - permanent mark
 - elevation mark
 - bench mark
- ___ 96. A mark on a permanent object fixed to the ground from which land measurements and elevations are taken is called:
- station mark
 - permanent mark
 - elevation mark
 - bench mark
- ___ 97. To position a leveling instrument directly over a given point, a _____ _____ is used.
- bench mark
 - nylon string
 - plumb bob
 - 4' level
- ___ 98. What is the three-legged device called that holds the level-transit?
- three legged mount
 - tripod
 - transit stand
 - transit base
- ___ 99. What is the device called that is used to sight level lines and lay out or measure horizontal lines?
- horizontal transit
 - line level
 - builder's level
 - level-transit
- ___ 100. What is the device called that is used to lay out or check level and plumb lines?
- horizontal transit
 - line level
 - builder's level
 - level-transit

- ___ 101. A square of shingles equals:
- a. 3 bundles
 - b. 5 bundles
 - c. 8 bundles
 - d. 10 bundles
- ___ 102. The size of a standard asphalt shingle is:
- a. 12" x 24"
 - b. 12" x 36"
 - c. 10" x 24"
 - d. 10" x 36"
- ___ 103. How many tabs does a standard asphalt shingle have?
- a. 1
 - b. 2
 - c. 3
 - d. 4
- ___ 104. How many nails are recommended to be put in a standard asphalt shingle in low wind areas?
- a. 3
 - b. 4
 - c. 6
 - d. 8
- ___ 105. How many nails are recommended to be put in a standard asphalt shingle in high wind areas?
- a. 3
 - b. 4
 - c. 6
 - d. 8
- ___ 106. How many inches of shingle should be exposed on the first row of shingles?
- a. 2
 - b. 5
 - c. 4
 - d. 3
- ___ 107. How many inches of shingle should be exposed on each row after the first one?
- a. 2
 - b. 5
 - c. 4
 - d. 3
- ___ 108. What is the name of the material that is used to back up the first course of shingles and fill in the space between the tabs?
- a. starter strip
 - b. backing strip
 - c. fill-in strip
 - d. weather proof strip
- ___ 109. _____ is installed around chimneys to make them watertight to prevent leakage.
- a. fascia
 - b. tar
 - c. flashing
 - d. flange
- ___ 110. Another name for a "saddle" that is installed on a roof behind a chimney to direct water away from the chimney is called a:
- a. chimney shield
 - b. roof flashing
 - c. triangular shield
 - d. cricket
- ___ 111. Instead of using the standard material that is made to back up the first course of shingles that fills in the space between the tabs, what else could be used?
- a. flashing
 - b. a shingle turned the normal direction
 - c. inverted shingle
 - d. ridge cap
- ___ 112. The lower part of a roof that projects over an exterior wall is called a/an _____. Also called the overhang.
- a. soffit
 - b. tail
 - c. fascia
 - d. eave

- ___ 113. The roof edges along the eaves and rake should have a metal _____.
- a. roof type
 - b. drip edge
 - c. thin piece
 - d. flashing guard
- ___ 114. What material is incorporated into some shingles that makes it retard algae growth?
- a. zinc
 - b. copper
 - c. asphalt
 - d. tar
- ___ 115. What must be used under shingles for underlayment?
- a. felt
 - b. tar
 - c. roll roofing
 - d. metal flashing
- ___ 116. Concrete has high _____ strength.
- a. compression
 - b. tensile
 - c. internal
 - d. external
- ___ 117. Concrete has low _____ strength.
- a. compression
 - b. tensile
 - c. internal
 - d. external
- ___ 118. A groove cut into concrete to allow for expansion due to temperature changes is called a/an:
- a. temperature groove
 - b. expansion gap
 - c. expansion joint
 - d. expansion groove
- ___ 119. Which of the following would **not** increase the tensile strength of concrete?
- a. steel fibers
 - b. reinforcement bars
 - c. reinforcement wire
 - d. gravel
- ___ 120. Which of the following increases the compression strength of concrete?
- a. steel fibers
 - b. reinforcement bars
 - c. reinforcement wire
 - d. gravel
- ___ 121. The process of which concrete hardens by adding water is called:
- a. hardening
 - b. dehydration
 - c. dilution
 - d. hydration
- ___ 122. _____ are used to attach roof plates or sills to masonry work.
- a. U bolts
 - b. Eye bolts
 - c. Anchor bolts
 - d. Long bolts
- ___ 123. The narrow space between adjacent stones, bricks or blocks that is filled with mortar is called a:
- a. cement joint
 - b. mortar gap
 - c. mortar groove
 - d. mortar joint
- ___ 124. A board about 3' square where mortar is placed and ready for the use of the bricklayer is called a:
- a. brickboard
 - b. mortarboard
 - c. mortar tray
 - d. squareboard
- ___ 125. A temporary structure made of metal pipes or tubes that allows brick layers or construction workers to perform their jobs at certain heights is called a:
- a. scaffold
 - b. ladder
 - c. lift
 - d. construction platform

- ___ 139. Which of the following is not a type of warp in wood?
- a. cup
 - b. fork
 - c. twist
 - d. crook
- ___ 140. Which type nail is smaller in diameter?
- a. box
 - b. common
 - c. cut
 - d. they are all the same diameter
- ___ 141. Which part of the body is the most susceptible to shop injury?
- a. legs
 - b. feet
 - c. head
 - d. arms and hands
- ___ 142. Rigid copper pipe comes in standard ___ ft. lengths.
- a. 8
 - b. 10
 - c. 15
 - d. 20
- ___ 143. Which of the following is a disadvantage of metal siding and metal roofing materials?
- a. fire resistance
 - b. life span
 - c. noise factor
 - d. maintenance
- ___ 144. The thickness of galvanized steel roofing sheets is classified by:
- a. R value
 - b. gauge number
 - c. mil thickness
 - d. pitch
- ___ 145. What type washer is installed on screws and nails that are used on metal siding and metal roofing products?
- a. lock
 - b. flat
 - c. neoprene
 - d. metal
- ___ 146. Which finishing tool would be used to leave a rough surface on a concrete floor in a livestock confinement building?
- a. power trowel
 - b. bull float
 - c. finishing trowel
 - d. barn broom
- ___ 147. A concrete finishing tool that has a rectangular blade with a long handle that is used to level concrete surfaces. It is made of wood, aluminum or magnesium.
- a. bull float
 - b. power float
 - c. edger
 - d. finishing trowel
- ___ 148. Exterior walls should be lengths divisible by ___ feet
- a. 2
 - b. 3
 - c. 5
 - d. 10
- ___ 149. What determines whether or not a house is functional?
- a. whether or not it has a basement
 - b. whether or not it has 3 bedrooms
 - c. whether or not it represents the lifestyle of those who occupy it
 - d. whether or not it has more than one bathroom
- ___ 150. Why should a title search be made before purchasing a lot?
- a. to determine if there are any legal claims against the property
 - b. to determine if it is for sale
 - c. to determine how big the lot is
 - d. to determine what type loan can be acquired

2014 Ag Const Test Bank B
Answer Section

MULTIPLE CHOICE

1. ANS: C PTS: 1
2. ANS: A PTS: 1
3. ANS: B PTS: 1
4. ANS: A PTS: 1
5. ANS: D PTS: 1
6. ANS: C PTS: 1
7. ANS: B PTS: 1
8. ANS: A PTS: 1
9. ANS: B PTS: 1
10. ANS: C PTS: 1
11. ANS: D PTS: 1
12. ANS: B PTS: 1
13. ANS: A PTS: 1
14. ANS: D PTS: 1
15. ANS: C PTS: 1
16. ANS: D PTS: 1
17. ANS: C PTS: 1
18. ANS: B PTS: 1
19. ANS: A PTS: 1
20. ANS: D PTS: 1
21. ANS: A PTS: 1
22. ANS: C PTS: 1
23. ANS: D PTS: 1
24. ANS: D PTS: 1
25. ANS: C PTS: 1
26. ANS: B PTS: 1
27. ANS: B PTS: 1
28. ANS: A PTS: 1
29. ANS: C PTS: 1
30. ANS: D PTS: 1
31. ANS: B PTS: 1
32. ANS: C PTS: 1
33. ANS: D PTS: 1
34. ANS: A PTS: 1
35. ANS: B PTS: 1
36. ANS: C PTS: 1
37. ANS: D PTS: 1
38. ANS: B PTS: 1
39. ANS: B PTS: 1
40. ANS: B PTS: 1
41. ANS: D PTS: 1

42.	ANS: C	PTS: 1
43.	ANS: A	PTS: 1
44.	ANS: A	PTS: 1
45.	ANS: B	PTS: 1
46.	ANS: C	PTS: 1
47.	ANS: B	PTS: 1
48.	ANS: D	PTS: 1
49.	ANS: A	PTS: 1
50.	ANS: D	PTS: 1
51.	ANS: D	PTS: 1
52.	ANS: C	PTS: 1
53.	ANS: B	PTS: 1
54.	ANS: A	PTS: 1
55.	ANS: C	PTS: 1
56.	ANS: A	PTS: 1
57.	ANS: C	PTS: 1
58.	ANS: B	PTS: 1
59.	ANS: A	PTS: 1
60.	ANS: C	PTS: 1
61.	ANS: D	PTS: 1
62.	ANS: A	PTS: 1
63.	ANS: C	PTS: 1
64.	ANS: D	PTS: 1
65.	ANS: B	PTS: 1
66.	ANS: B	PTS: 1
67.	ANS: B	PTS: 1
68.	ANS: D	PTS: 1
69.	ANS: D	PTS: 1
70.	ANS: C	PTS: 1
71.	ANS: A	PTS: 1
72.	ANS: A	PTS: 1
73.	ANS: C	PTS: 1
74.	ANS: B	PTS: 1
75.	ANS: B	PTS: 1
76.	ANS: C	PTS: 1
77.	ANS: D	PTS: 1
78.	ANS: B	PTS: 1
79.	ANS: C	PTS: 1
80.	ANS: D	PTS: 1
81.	ANS: A	PTS: 1
82.	ANS: B	PTS: 1
83.	ANS: A	PTS: 1
84.	ANS: C	PTS: 1
85.	ANS: D	PTS: 1
86.	ANS: C	PTS: 1
87.	ANS: A	PTS: 1
88.	ANS: B	PTS: 1

89.	ANS: C	PTS: 1
90.	ANS: D	PTS: 1
91.	ANS: C	PTS: 1
92.	ANS: A	PTS: 1
93.	ANS: C	PTS: 1
94.	ANS: B	PTS: 1
95.	ANS: A	PTS: 1
96.	ANS: D	PTS: 1
97.	ANS: C	PTS: 1
98.	ANS: B	PTS: 1
99.	ANS: C	PTS: 1
100.	ANS: D	PTS: 1
101.	ANS: A	PTS: 1
102.	ANS: B	PTS: 1
103.	ANS: C	PTS: 1
104.	ANS: B	PTS: 1
105.	ANS: C	PTS: 1
106.	ANS: D	PTS: 1
107.	ANS: B	PTS: 1
108.	ANS: A	PTS: 1
109.	ANS: C	PTS: 1
110.	ANS: D	PTS: 1
111.	ANS: C	PTS: 1
112.	ANS: D	PTS: 1
113.	ANS: B	PTS: 1
114.	ANS: B	PTS: 1
115.	ANS: A	PTS: 1
116.	ANS: A	PTS: 1
117.	ANS: B	PTS: 1
118.	ANS: C	PTS: 1
119.	ANS: D	PTS: 1
120.	ANS: D	PTS: 1
121.	ANS: D	PTS: 1
122.	ANS: C	PTS: 1
123.	ANS: D	PTS: 1
124.	ANS: B	PTS: 1
125.	ANS: A	PTS: 1
126.	ANS: B	PTS: 1
127.	ANS: A	PTS: 1
128.	ANS: A	PTS: 1
129.	ANS: D	PTS: 1
130.	ANS: A	PTS: 1
131.	ANS: C	PTS: 1
132.	ANS: D	PTS: 1
133.	ANS: A	PTS: 1
134.	ANS: C	PTS: 1

135.	ANS: A	PTS: 1
136.	ANS: B	PTS: 1
137.	ANS: C	PTS: 1
138.	ANS: D	PTS: 1
139.	ANS: B	PTS: 1
140.	ANS: A	PTS: 1
141.	ANS: D	PTS: 1
142.	ANS: B	PTS: 1
143.	ANS: C	PTS: 1
144.	ANS: B	PTS: 1
145.	ANS: C	PTS: 1
146.	ANS: D	PTS: 1
147.	ANS: A	PTS: 1
148.	ANS: A	PTS: 1
149.	ANS: C	PTS: 1
150.	ANS: A	PTS: 1