

Box Fill:

6. Can a round $4 \times \frac{1}{2}$ in. box marked as 8 cu in. with manufactured cable clamps supplied with 14/2 NM be used with a luminaire that has two 18 AWG TFN and a canopy cover?
(a) Yes (b) No
7. What size outlet box is required for one 12/2 NM cable that terminates on a switch, one 12/3 NM cable that terminates on a receptacle, and the box has manufactured cable clamps?
(a) $4 \times 1 \frac{1}{4}$ square (b) $4 \times 1 \frac{1}{2}$ square
(c) $4 \times 2 \frac{1}{8}$ square (d) none of these
8. How many 14 AWG THHN conductors can be pulled through a $4 \times 1 \frac{1}{2}$ square box with a plaster ring of 3.6 cu in.? The box contains two duplex receptacles, five 14 AWG THHN conductors and two grounding conductors.
(a) 1 (b) 2 (c) 3 (d) 4

Junction Boxes:

A junction box has two 3-inch raceways entering on the left side with the Conductors from one 3 inch entering from the top 3-inch raceway. Two 2-inch raceways enter from the right side and two 3-inch raceways enter from the bottom.

9. What is the distance from the left wall to the right wall?
(a) 18 in. (b) 21 in. (c) 24 in. (d) 20 in.
10. What is the distance from the bottom wall to the top wall?
(a) 18 in. (b) 21 in. (c) 24 in. (d) 15 in.
11. What is the distance from between the raceways that contain the same conductors?
(a) 18 in. (b) 21 in. (c) 24 in. (d) 15 in.

Raceways:

12. How many 16 AWG TFFN conductors can be installed in a $\frac{3}{4}$ in. electrical metallic tubing?
(a) 40 (b) 26 (c) 30 (d) 29
13. How many 1/0 AWG XHHW can be installed in a 2 in. flexible metal conduit?
(a) 7 (b) 6 (c) 16 (d) 13
14. If we have a 2 in. rigid metal conduit and we want to install three THHN compact conductors, what is the largest compact conductor permitted to be installed?
(a) 4/0 AWG (b) 250 kcmil (c) 300 kcmil (d) 500 kcmil
15. What is the cross-sectional area in sq in. for 10 AWG THW?
(a) 0.0333 (b) 0.0172 (c) 0.0252 (d) 0.0278