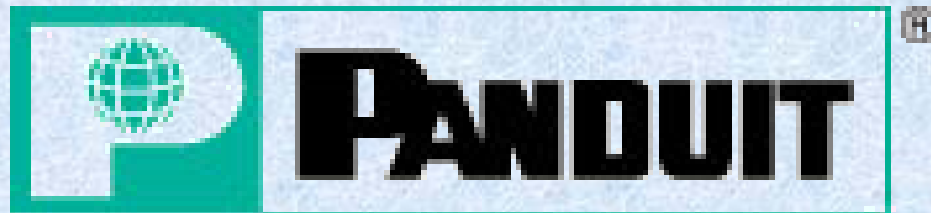


Panduit Certified Installer



Copper Certification Review

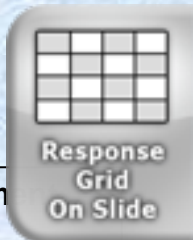


2 What is the location called where telephone and communications cables are brought into the building?

0%

- ✓ 1. Entrance Facility
- 2. Telecommunications Rooms
- 3. Equipment Room
- 4. Vertical Cabling (Backbone)
- 5. Horizontal Cabling

Entrance F... Telecommun... Equipm...
 Vertical C... Horizontal...



³How much copper cable slack is defined for terminating at a Work Area outlet?

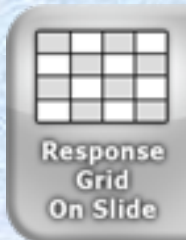
✓ 1. 300 mm (12 inches)

2. 1 meter

3. 3 meters

4. 5 meters

0%



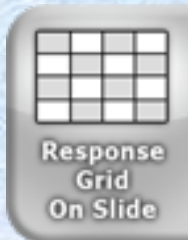
300 mm (12... 1 meter 3 meters 5 meters

4 Proper labeling of cables and cabling components makes troubleshooting easier.

- ✓ 1. True
- 2. False

0%

True False



5 Which TIA standard defines the balanced twisted pair cabling requirements?

1. TIA 606-A

2. TIA 568-B.1

✓ 3. TIA 568-B.2

4. TIA 568-B.3

0%



Response
Grid
On Slide

TIA 606-A TIA 568-B.1 TIA 568-B.2 TIA 568-B.3

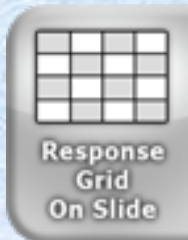
6 Determining the raceway and pulling the cable are the two main stages of installing a copper cabling system.

1. True

0%

✓ 2. False

True False

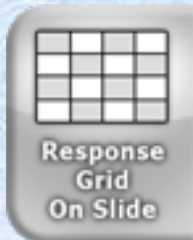


7 When shielded cable is installed, the shield must be bonded to the patch panel or jack to which the cable is terminated at both ends.

- ✓ 1. True
- 2. False

0%

True False



8 What standard defines the Commercial Building Grounding and Bonding Requirements for Telecommunications?

1. TIA 606-A 0%
2. TIA 568-B
- ✓ 3. TIA 607-A
4. TIA 569-B

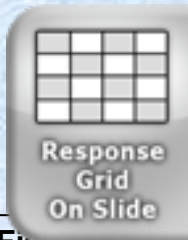


Response
Grid
On Slide

TIA 606-A TIA 568-B TIA 607-A TIA 569-B

9 What tool is required for terminating cables on a 110 style patch panel?

1. Hammer
- ✓ 2. Punchdown tool **0%**
3. Kellem Grip
4. Fish tape



Hammer Punchdown ... Kellem Grip Fish tape

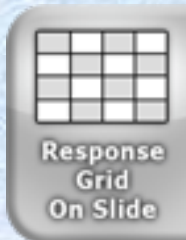
¹⁰Punchdown patch panels are the only option for terminating copper cabling in the TR.

1. True

✓ 2. False

0%

True False



11 Which of the following describes Panduit's concerns for requiring cabling technicians to complete this training?

1. Best practices are utilized for installing copper cabling

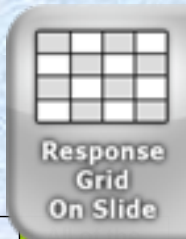
2. Installers have an understanding of industry standards

3. Cabling is installed in a neat and workmanlike manner

✓ 4. All of the above

0%

Best pract... Installers... Cabling is...

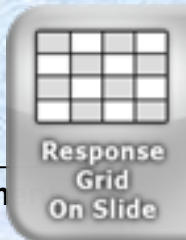


12 What is the locations called that houses the electronic equipment related to communications infrastructure?

1. Entrance Facility
2. Telecommunications Rooms
- ✓ 3. Equipment Room
4. Vertical Cabling (Backbone)
5. Horizontal Cabling

0%

Entrance F... Telecommun... Equipm...
 Vertical C... Horizontal...



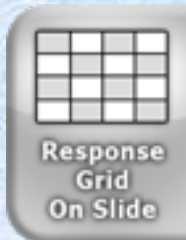
13 Testing failures for return loss can usually be tied to loose cable ties.

1. True

✓ 2. False

0%

True False

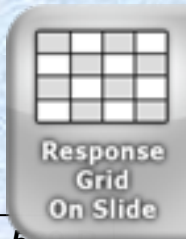


14 What standard defines the Administration Standards for the Telecommunications Infrastructure of Commercial Buildings?

- ✓ 1. TIA 606-A
- 2. TIA 568-B
- 3. TIA 607-A
- 4. TIA 569-B

0%

TIA 606-A TIA 568-B TIA 607-A TIA 569-B

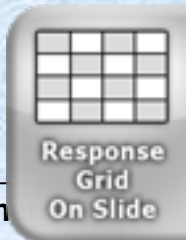


15 What are located throughout the building to provide termination and manageability for the structured cabling system?

1. Entrance Facility
- ✓ 2. Telecommunications Rooms
3. Equipment Room
4. Vertical Cabling (Backbone)
5. Horizontal Cabling

0%

Entrance F... Telecommun... Equipm...
 Vertical C... Horizontal...

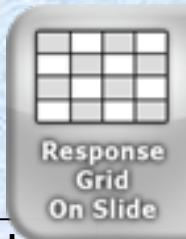


16 What test measures the coupling of the signal from one pair to another at the end of the cable from which the signal is transmitted?

0%

1. Insertion Loss (Attenuation)
2. Wiremap
- ✓ 3. NEXT
4. Return Loss

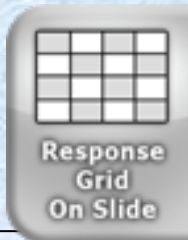
Insertion ... Wiremap NEXT Return Loss



17 How much copper cable slack is defined to allow for moves, adds, and changes in a Telecommunications Room?

0%

1. 1 meter
2. 2 meters
- ✓ 3. 3 meters (10 ft.)
4. 5 meters



1 meter 2 meters 3 meters (...) 5 meters

18 Which of the following defines the minimum bend radius for copper cables?

1. 0.5 inch

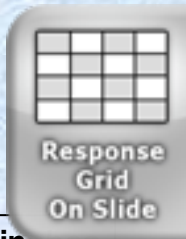
0%

✓ 2. Four times the diameter of the cable

3. Ten times the diameter of the cable

4. 2 inches

0.5 inch Four times... Ten times ... 2 inches

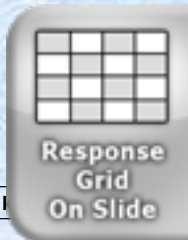


19 Which of the following is required when terminating a copper jack?

1. Minimal removal of the cable Jacket
2. No more than .5 inch (12.5mm) untwisting of the cable pairs
3. Do not kink the cable
- ✓ 4. All of the above

0%

Minimal re... No more th... Do not l



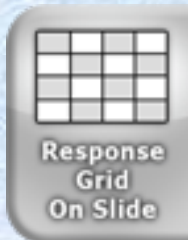
20 The difference between the T568A and T568B wiring scheme is that the positions of the Blue and Brown pairs are reversed.

1. True

0%

✓ 2. False

True False



21 What are the two fundamental organizations that develop the cabling standards that are implemented worldwide?

1. ISO and NEC

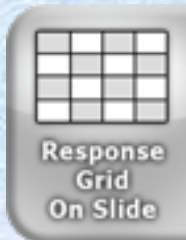
0%

2. TIA and UL

✓ 3. ISO and TIA

4. NFPA and CELEC

ISO and NEC TIA and UL
 ISO and TIA NFPA and C...

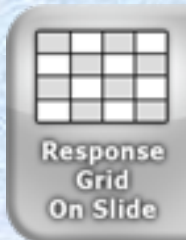


22 Paint piercing washers and thread forming screws should be considered for constructing telecommunication racks and mounting equipment to assure proper metallic bonding for grounding.

0%

- ✓ 1. True
- 2. False

True False



23 What is the best method for troubleshooting a problem in a copper cable installation?

1. Re-test until they pass.

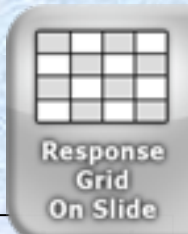
0%

✓ 2. Logical Process of Elimination

3. Re-terminate all connections

4. Replace all of the cable

Re-test un... Logical Pr... Re-termina... Replace all...



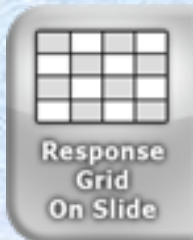
24 Cables may lie directly on ceiling grids and tiles in a suspended ceiling.

1. True

✓ 2. False

0%

True False

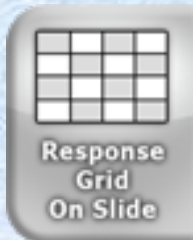


25 All conductive metallic components in a Telecommunications Room should be bonded to a TMGB or TGB.

- ✓ 1. True
- 2. False

0%

True False



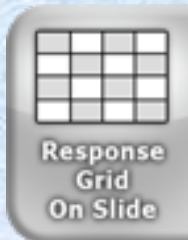
26 Panduit TG and TP style jacks require the same process for proper termination.

1. True

✓ 2. False

0%

True False

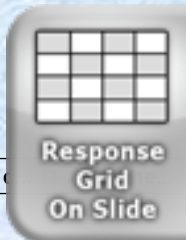


27 Testing assures that...

1. Cables are all properly connected.
2. Cable runs are not too long
3. That the cabling system will perform to limits defined per industry standards.
- ✓ 4. All of the above

0%

Cables are... Cable runs... That the c...

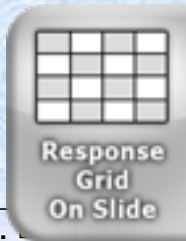


28 Effective cable management allows for quick and easy moves, adds, and changes. Which of the following are benefits of effective cable management?

1. Protects cables from crushing and pinching
2. Provides aesthetically pleasing appearance
3. Assures bend radius control for the cables
- ✓ 4. All of the above

0%

Protects c... Provides a... Assures be...




29 Which of the following indicates the recommendation from TIA 569-B for pathway sizing to accommodate growth after the initial installation?

1. Pathway should accommodate 20% more cables than initial install

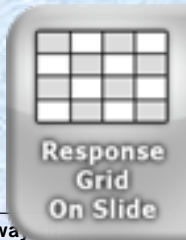
0%

2. Pathway should accommodate 30% more cables than initial install

 3. Pathway should accommodate 50% more cables than Initial Install

4. Pathway should accommodate 100% more cables than initial install

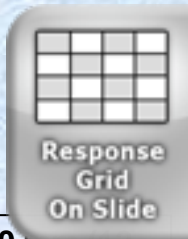
Pathway sh... Pathwa...
 Pathway sh... Pathway sh...



30 Which of the following is not required for a work area outlet?

1. Modular 8-position jack
2. Faceplate
3. Screw terminal type jack
4. 300 mm (12 inches) cable slack

0%



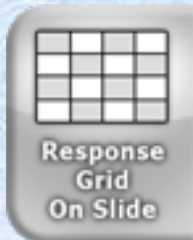
Modular 8-... Faceplate Screw term... 300 mm (12...

31 When power and data cables are routed through the same pathway, a physical divider is required to separate the two different types of cables.

0%

- ✓ 1. True
- 2. False

True False



32 What test parameter measures the loss of signal strength across the cable?

1. NEXT
2. Insertion loss (Attenuation)
3. Delay Skew
4. Length

0%

NEXT Insertion ... Delay Skew Len



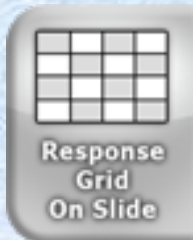
Response
Grid
On Slide

33 Each Telecommunications Room throughout the facility needs to be labeled with a unique alpha/numeric identifier.

- ✓ 1. True
- 2. False

0%

True False

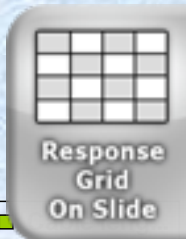


34 If NEXT fails, which of the following needs to be checked?

1. Cable ties cinched too tightly
2. Tight bends in the cable
3. Pairs untwisted more than .5 inch (12.5mm) at termination
4. Cable length is too short

0%

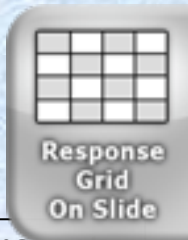
Cable ties... Tight bend... Pairs untw...



35 Which type of test adaptor is equipped with a one meter test lead?

1. Horizontal Link
2. Patch cord
3. Channel
- ✓ 4. Permanent Link

0%



Horizontal... Patch cord Channel Permanent ...

36 What type of grounding lug is recommended per J-STD-6 07-A for grounding telecommunications systems?

1. 1-hole setscrew lug
2. 1-hole irreversible compression type (crimp) lug
3. 2-hole setscrew lug
- ✓ 4. 2-hole irreversible compression type (crimp) lug

0%

1-hole set... 1-hole irr... 2-hole set...



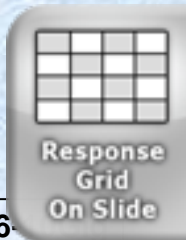
Response
Grid
On Slide

37 TP connectors are used to terminate...

1. CAT 3
2. CAT 5
- ✓ 3. CAT 5e
4. CAT 6
5. CAT 6-10Gig

0%

CAT 3 CAT 5 CAT 5e CAT 6 CAT 6

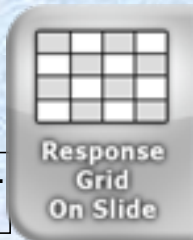


38 Which of the following is defined per TIA 606-A?

1. Labels must be printed with a mechanical device
2. Labels must be easy to read
3. Labels must be resistant to environmental conditions
- ✓ 4. All of the above

0%

Labels mus... Labels mus...
 Labels mus... All of the...

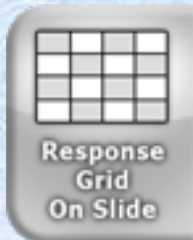


39 Horizontal cables and Work Area faceplate ports need to be labeled with an alpha/numeric identifier that indicates the termination point of the cable in the Telecommunications Room.

0%

- ✓ 1. True
- 2. False

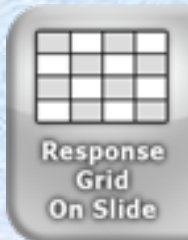
True False



40 Which of the following types of tests are defined for TIA 568-B?

1. Basic Link/Permanent Link
2. Basic Link/ Channel
- ✓ 3. Channel/Permanent Link
4. Basic Link/Horizontal Link

0%

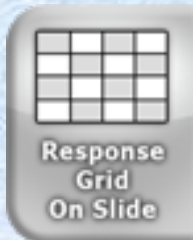


41 The difference between a Permanent Link and a Channel is that the Channel test measures the Permanent Link plus the patch cords at both ends.

0%

- ✓ 1. True
- 2. False

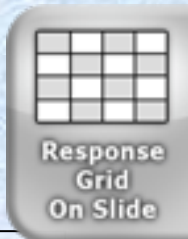
True False



42 What is the minimum size conductor defined per J-STD-607-A for a Telecommunications Bonding Backbone cable?

- ✓ 1. #6 AWG
- 2. 1/0 AWG
- 3. 3/0 AWG
- 4. 112 AWG

0%



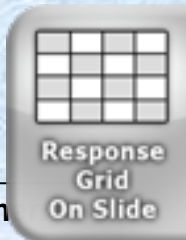
#6 AWG 1/0 AWG 3/0 AWG 112 AWG

43 _____ is the cabling that is routed between ERs and TRs within buildings. Usually is optical fiber.

1. Entrance Facility
2. Telecommunications Rooms
3. Equipment Room
- ✓ 4. Vertical Cabling (Backbone)
5. Horizontal Cabling

0%

Entrance F... Telecommun... Equipm...
 Vertical C... Horizontal...

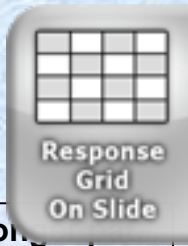


44 Which of the following is an alternative to providing horizontal cable management on a Telecommunications Rack?

0%

1. Vertical cable management
2. High density rack
- ✓ 3. Angled patch panels
4. Longer patch cords

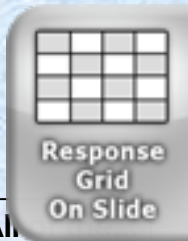
Vertical c... High densi... Angled pat... Long...



45 What should be checked if Return Loss fails?

1. Cable ties cinched too tightly **0%**
2. Tight bends in the cabling
3. Kinks in the cable
- ✓ 4. All of the above

Cable ties... Tight bend... Kinks in t... All



46 A cable tie must be cinched as tightly as possible around the cables so that it cannot be rotated with your fingers.

0%

1. True

✓ 2. False

True False



Response
Grid
On Slide

47 What standard defines the Commercial Building Standard for Telecommunications Pathways and Spaces?

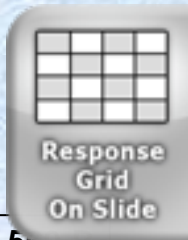
1. TIA 606-A

2. TIA 568-B

3. TIA 607-A

✓ 4. TIA 569-B

0%



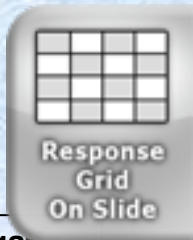
TIA 606-A TIA 568-B TIA 607-A TIA 569-B

48 What test would fail if the termination schemes were not the same at both ends of the cable?

- ✓ 1. Wiremap
- 2. ELFEXT
- 3. PSACR
- 4. Propagation Delay

0%

Wiremap ELFEXT PSACR Propagation...



49 TG connectors are used to terminate...

1. CAT 3

2. CAT 5

3. CAT 5e

✓ 4. CAT 6

5. CAT 6-10Gig

0%

CAT 3 CAT 5 CAT 5e CAT 6 CAT 6-10Gig

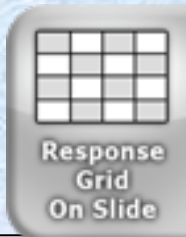


Response
Grid
On Slide

50 What is the maximum pulling tension per lb/ft allowed for pulling copper cable through a pathway?

1. 10 lb/ft (50 n)
- ✓ 2. 25 lb/ft (110 n)
3. 50 lb/ft (220 n)
4. 100 lb/ft (440 n)

0%



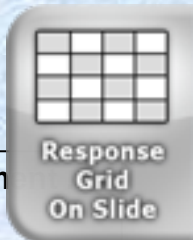
10 lb/ft (... 25 lb/ft (... 50 lb/ft (... 100 lb/ft ...

51 _____ is the cable, connectors, cords, and support structure for the cabling that is routed between the TRs and work area outlets.

0%

1. Entrance Facility
2. Telecommunications Rooms
3. Equipment Room
4. Vertical Cabling (Backbone)
- ✓ 5. Horizontal Cabling

Entrance F... Telecommun... Equipm...
 Vertical C... Horizontal...



52 ISO Class E corresponds to...

1. CAT 3

2. CAT 5

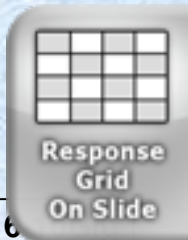
3. CAT 5e

✓ 4. CAT 6

5. CAT 6-10Gig

0%

CAT 3 CAT 5 CAT 5e CAT 6 CAT 6-10Gig



53 Participant Scores

Points

Participant

Points

Participant