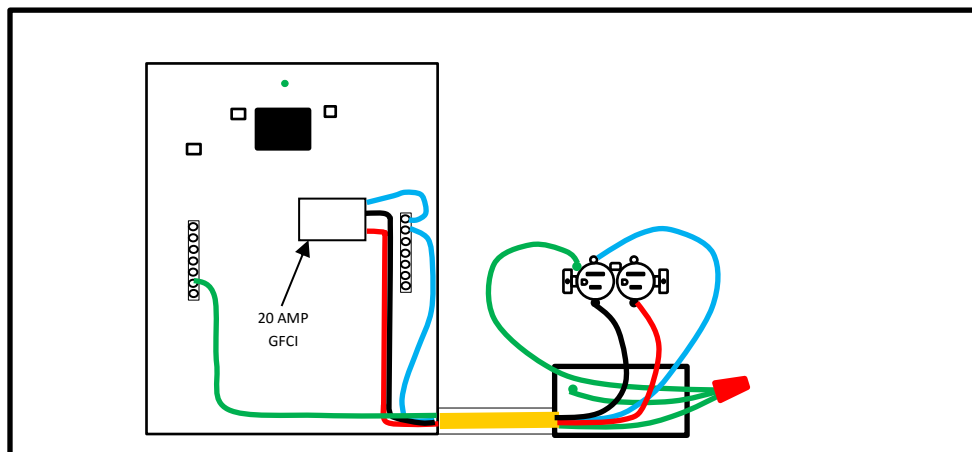




Item		Points Possible	# of Opportunities	Points Each	Score Based on # missed
1	Proper conductor selection – #12 AWG	2	1	2	Incorrect size = 0
2	Proper size & type over current protection – Double Pole 20 A/GFCI	2	1	2	All or None
3	Branch Circuit connections in SEP made correct, tight, no bare copper at connections.	5	5	1	1= 4 2= 3 3= 2 4= 1 5= 0
4	Grounding (bond) wire properly used - 1 SEP properly bonded - 1	2	2	1	1= 1 2= 0
5	Correct receptacle installed – 20A/120V/Split Wired	2	1	2	All or None
6	Correct wire connections at split wired receptacle UG - Brass EQG - Green Grounded - Silver	4	4	1	1= 3 2= 2 3= 1 4= 0
7	Wire hooks made and used properly [CW loop/3/4 full contact under terminal/ No bare copper beyond device/No insulation under terminal screw]	4	4	1	1= 3 2= 2 3= 1 4= 0
8	Solderless connectors (size, tight, no exposed wire)	1	1	1	All or None
9	Answers to questions (-1 pt. for no units)	8	4	2	1= 6 2= 4 3= 2 4= 0
10	Safety Violations	0	1	2	- 2pts/violation
Total Possible:		30			

Answers to Questions

- 17 amperes: $W = V \times A$: $2040\text{ W} = 120\text{ V} \times A$, $2040\text{ W} \div 120\text{ V} = 17\text{ amperes}$
- 7.059 ohms: $R = E \div I$: $R = 120 \div 17$, $R = 7.059\text{ ohms}$
- 17 Amps: $B - I_T = E_{\text{Source}} \div R_T$: $I_T = 240\text{V} \div 14.118\text{ ohms} = 16.999\text{ amperes}$, round to 17.
- Answer: D - each outlet of the duplex receptacle outlets receives power from electrical bus contacts that are 180° out of phase. The receptacles are two separate parallel circuits that share an un-grounded conductor.