

PRACTICE TEST
for
TABLES AND GRAPHS
includes
PART I - TABLES
PART II - GRAPHS

THIS TEST MIMICS THE STYLE OF TEST FOR
TABLES AND GRAPHS USED BY THE PLANT
OPERATOR SELECTION SYSTEM (POSS).

PRACTICING WITH TABLES AND GRAPHS

The Plant Operator Selection System (POSS) includes tests for tables and graphs.

To help you prepare, a two-part practice test follows. Each part is designed so you may practice correctly interpreting tables and graphs within a suggested time limit.

Part I concerns reading tables that are similar in design to multiplication tables. The questions you answer will be multiple-choice and depend upon you accurately choosing answers (values or information) from the table. Carefully review the instructions before beginning this part, and then set a timer for three (3) minutes. You should be able to answer all 24 questions within this time.

Part II checks your ability to interpret charts with graphed information. In this part, you are also presented a choice of possible answers. Carefully review the instructions before beginning this part, and then set a timer for two (2) minutes. You should be able to read the instructions and answer all 14 questions within this time.

Practicing taking these tests will familiarize you with the style of the real selection tests. To create conditions most like a real test:

- Practice by taking Part I and Part II tests, together one after the other
- Be sure to set a timer before beginning each part
- Do not look at the answers until you have completed all the test questions

PART I - TABLES

HOW TO TAKE THIS TEST

These instructions provide an example using the sample Table A, shown below:

Table A

Standard Radiant Convactor Heating Output in BTU per HR

Convactor Length in Inches	Temperature of Forced Hot Water at Degrees Fahrenheit		
	180°	185°	190°
16	1700.3	1897.8	2040.3
20	2280.7	2330.0	2480.0
24	2810.6	2820.6	3080.0

Table A gives you information about the heating output of standard sized radiant convection piping (*note the title of the table*), as measured in BTU per Hr (BTU/HR), for certain conditions. The conditions are determined by the values in the first column on the left side, which shows the length of the radiant convactor, in inches. The top row shows how the BTU output varies depending on the temperature, measure in degrees Fahrenheit (°F) of the water being forced through the standard radiant convactor.

For example, for a convactor with a length of 20 inches and containing water at 185°F, read across from 20 and down from 185. In this case, the heat output will be 2330.0 BTU/HR.

Convactor Length in Inches	Temperature of Forced Hot Water at Degrees Fahrenheit		
	180°	185°	190°
16	1700.3	1897.8	2040.3
20	2280.7	2330.0	2480.0
24	2810.6	2820.6	3080.0

Now consider a sample problem on the next page that rearranges the information somewhat:

Tables and Graphs Test #3

Convector Length in Inches	Hot Water Temperature in °F	Standard Radiant Convector Heating Output in BTU per HR			
		A	B	C	D
24	185	1700.3 <input type="radio"/>	2040.3 <input type="radio"/>	2820.6 <input type="radio"/>	2820.6 <input type="radio"/>

In the table shown above, the two left-hand columns are Convector Length and Hot Water Temperature. In the row shown, the Convector Length is 24 and the hot water temperature is 185. Refer back to the Table A, read across from 24, and down from 185. See below for how this is done.

Convector Length in Inches	Temperature of Forced Hot Water at Degrees Fahrenheit		
	180°	185°	190°
16	1700.3	1897.8	2040.3
20	2280.7	2330.0	2480.0
24	2820.6	3080.0	

Now you see that 2820.6 is the correct BTU output for the radiant convector. Therefore, in this case, you completely fill the circle to the right of 2820.6 to show this is the correct answer:

Convector Length in Inches	Hot Water Temperature in °F	Standard Radiant Convector Heating Output in BTU per HR			
		A	B	C	D
24	185	1700.3 <input type="radio"/>	2040.3 <input type="radio"/>	2820.6 <input checked="" type="radio"/>	2820.6 <input type="radio"/>

BEGIN TEST PART I

Table I is the reference information for the test questions built into a different table on the next page. Completing the table on the next page requires looking up 24 sets of information from Table I. The suggested time limit to answer all 24 questions is three (3) minutes. To answer each test question, refer to Table I. Select your answer by filling the circle to the right of the answer you choose. Remember, speed AND accuracy are important. Check your work if you have time.

Table I

Standard Radiant Convactor Heating Output in BTU per HR

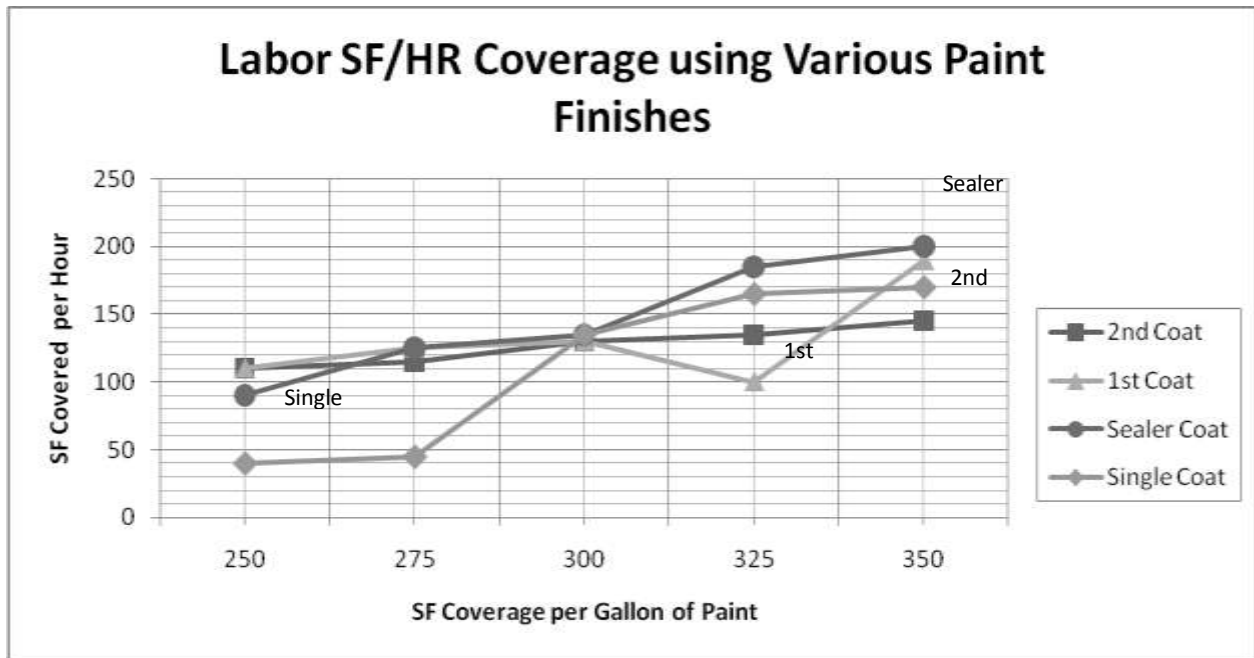
Convactor Length in Inches	Temperature of Forced Hot Water at Degrees Fahrenheit							
	180°	185°	190°	195°	200°	205°	210°	215°
16	1700.3	1897.8	2040.3	2130.7	2170.0	2846.7	3523.3	4200.0
20	2280.7	2330.0	2480.0	2780.6	2840.0	3426.7	4013.3	4600.6
24	2810.6	2820.6	3080.0	3090.5	3510.3	4206.7	4903.3	5600.0
28	3480.3	3530.0	3750.3	3840.0	4340.0	4860.6	5380.0	5900.3
32	2950.8	3635.6	4350.3	4560.2	4930.0	5453.3	5976.7	6500.0
36	3700.3	3973.3	4480.0	5150.0	5590.0	5960.8	6330.0	6700.8
40	4200.0	4480.2	4670.2	5230.0	6430.0	6720.0	7010.6	7300.0
44	4369.0	4558.3	4910.0	5670.0	7260.6	7406.7	4937.8	7700.3
48	5071.1	5315.6	4880.5	5810.0	7760.0	7973.3	5315.6	8400.0
56	5150.0	5457.8	5620.0	6090.0	7930.2	8186.7	5457.8	8700.6
60	5820.5	6440.5	6440.3	6977.5	7980.0	8420.3	8510.7	9300.8
64	6220.0	6745.0	6830.0	7720.0	8120.3	8580.0	9260.0	9500.1
68	6960.3	7200.3	7870.7	8030.5	8270.6	8913.3	10100.3	10200.0
72	7070.2	8180.0	8180.3	8570.0	9200.3	10166.7	10500.6	12100.3
76	8260.0	8440.3	9240.9	9380.1	9640.8	11026.7	11520.0	13800.3

Test Questions for Part I

Convector Length in Inches	Hot Water Temperature in °F	Standard Radiant Convector Heating Output in BTU per HR			
		A	B	C	D
40	185	3530.0 ○	12100.3 ○	5670.0 ○	4480.2 ○
44	190	5620.0 ○	4910.0 ○	8270.6 ○	3530.0 ○
36	205	8913.3 ○	4480.2 ○	5960.8 ○	4880.5 ○
76	200	6720.0 ○	9640.8 ○	3635.6 ○	3080.0 ○
68	195	8030.5 ○	3840.0 ○	3090.5 ○	7930.2 ○
76	205	6745.0 ○	4369.0 ○	7720.0 ○	11026.7 ○
48	200	2780.6 ○	5670.0 ○	7760.0 ○	4013.3 ○
48	205	3523.3 ○	4369.0 ○	7973.3 ○	13800.0 ○
32	200	1897.8 ○	5457.8 ○	6330.0 ○	4930.0 ○
68	215	7010.6 ○	10200.0 ○	2780.6 ○	7406.7 ○
24	195	3090.5 ○	7406.7 ○	2846.7 ○	7980.0 ○
48	190	4560.2 ○	8120.3 ○	4880.5 ○	2040.3 ○
16	215	8580.0 ○	3700.3 ○	4200.0 ○	8120.3 ○
56	210	8440.3 ○	6220.0 ○	7930.2 ○	5457.8 ○
28	180	3480.3 ○	3530.0 ○	4910.0 ○	2040.3 ○
72	190	9300.8 ○	3840.0 ○	4860.6 ○	8180.3 ○
44	200	1897.8 ○	8580.0 ○	4910.0 ○	7260.6 ○
64	185	6745.0 ○	10500.6 ○	2810.6 ○	2810.6 ○
20	210	4340.0 ○	4013.3 ○	3840.0 ○	6960.3 ○
28	205	6430.0 ○	11520.0 ○	4860.6 ○	10200.0 ○
60	195	3840.0 ○	6090.0 ○	6977.5 ○	3530.0 ○
56	180	8570.0 ○	5315.6 ○	5150.0 ○	6700.8 ○
72	210	5453.3 ○	6440.5 ○	6745.0 ○	10500.6 ○
16	190	6430.0 ○	2040.3 ○	2780.6 ○	6830.0 ○

PART II - GRAPHS

HOW TO TAKE THIS TEST



These instructions provide an example using the sample graph, above, titled "Labor SF/HR Coverage using Various Paint Finishes." The surface area that a laborer can cover with a finish differs depending on the line read on the graph. In this graph example, there are four possible paint finishes:

- 2nd Coat shown by a line with square marks
- 1st Coat, shown by a line with triangular marks
- Sealer Coat, shown by a line with dot marks
- Single Coat, shown by a line with diamond marks

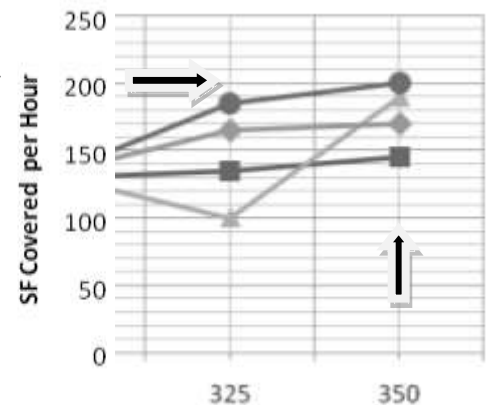
Each paint finish has its own rate for the SF/HR applied and SF/Gallon yielded. The test evaluates your ability to read the graph and select correct values for two types of tables.

For the first table type, consider this example:

A paint application of 200 SF/HR and (yield) of SF/Gallon coverage match at the line with the dotted marks. Read across from 200 and up from 350. In this case, the type of paint finish yielding 350 SF/gallon while applied at a rate of 200 SF/HR is the sealer coat.

As you can see, the answer for **sealer coat** has been darkened.

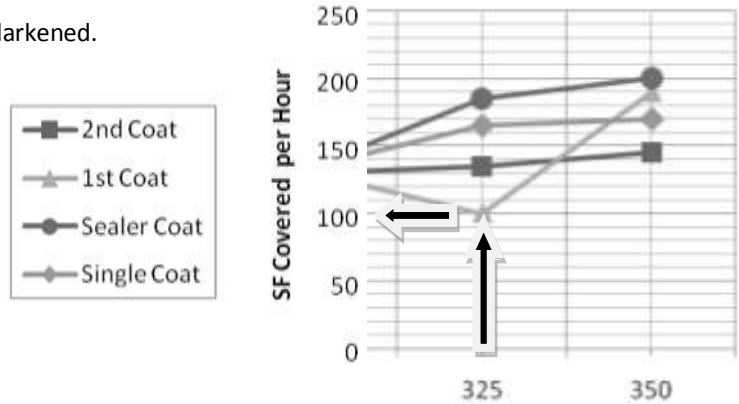
SF/HR Coverage per Paint Finish	Coverage (yield) in SF/Gallon	Single Coat	Sealer Coat	1st Coat	2nd Coat
200	350	○	●	○	○



For the second table type, consider this example that rearranges the information somewhat:

The two left-hand columns are yield coverage in SF/Gallon and Type of Paint Finish. In the row shown, the yield coverage in SF/Gallon is 325 and the Type of Paint Finish is the 1st Coat. Refer back to the graph and read up from 325 until the line representing the 1st Coat is intersected. From the point of intersection, follow the horizontal line to the left to read the SF coverage per hour. Note that each horizontal line marks 10 SF.

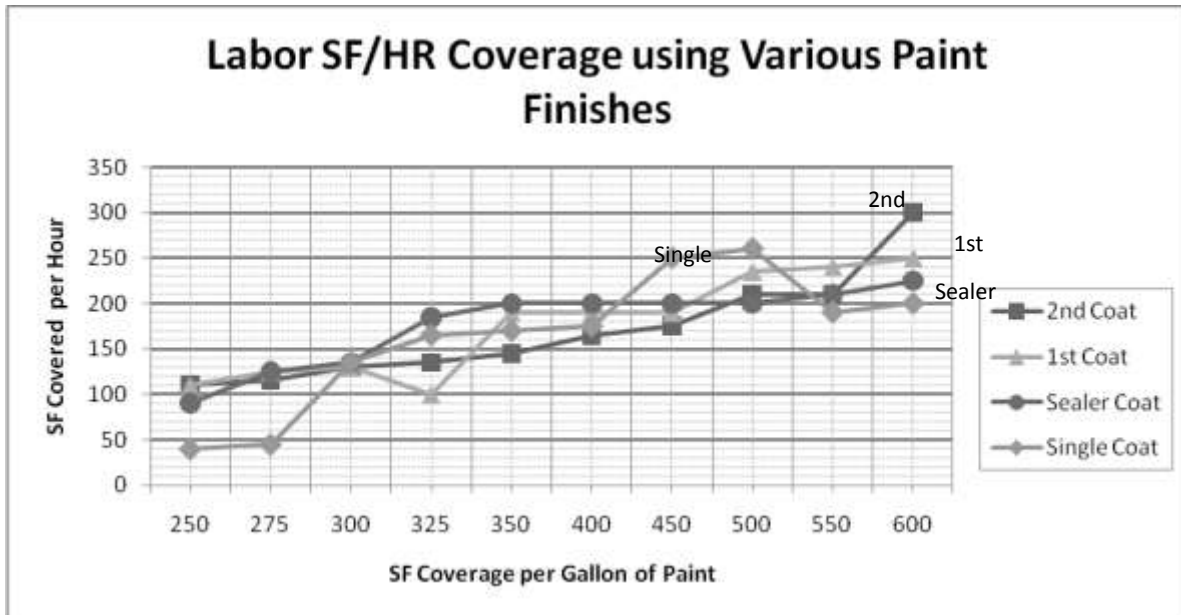
As you can see, the answer for **100 SF** has been darkened.



Coverage (yield) in SF/Gallon	Type of Paint Finish	SF/HR Coverage per Paint Finish				
		210	100	125	200	190
325	1st Coat	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

BEGIN TEST PART II

The graph shown is the reference information for the test questions built into the two tables that follow. Completing the tables requires looking up 14 sets of information from the graph. The suggested time limit to answer all 14 questions is two (2) minutes. To answer each test question, refer to the graph. Select your answer by filling the circle to the right of the answer you choose. Remember, speed AND accuracy are important. Check your work if you have time.



SF/HR Coverage per Paint Finish	Coverage (yield) in SF/Gallon	Single Coat	Sealer Coat	1st Coat	2nd Coat
200	400	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
250	600	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
135	325	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
200	500	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40	250	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
190	450	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
100	325	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Coverage (yield) in SF/Gallon	Type of Paint Finish	SF/HR Coverage per Paint Finish					
		210	130	125	200	190	190
400	1st Coat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
600	Sealer Coat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
325	1st Coat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
500	2nd Coat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
250	Sealer Coat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
275	Single Coat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
325	2nd Coat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Answers with explanations begin on the next page.