

Pressure Enthalpy Quiz 2

Due May 17 at 11:59pm

Points 11

Questions 11

Available May 3 at 8am - May 17 at 11:59pm 15 days

Time Limit 60 Minutes

Instructions

Please have a calculator, and something to write with/on handy.

This quiz was locked May 17 at 11:59pm.

Attempt History

	Attempt	Time	Score
LATEST	<u>Attempt 1</u>	20 minutes	11 out of 11

Score for this quiz: **11** out of 11

Submitted May 17 at 1:09pm

This attempt took 20 minutes.

Question 1

1 / 1 pts



The compressors used in the shop have the following parameters.
Calculate the displacement of the compressor.

Your Answer has to be in Cubic feet per hour.

The stroke of the compressor 1.99 is inches long

The number of Pistons 5

The RPM 1750

The Bore of the Compressor is 1.15 inches

Use "3.1416" as pi

Correct!

627.8

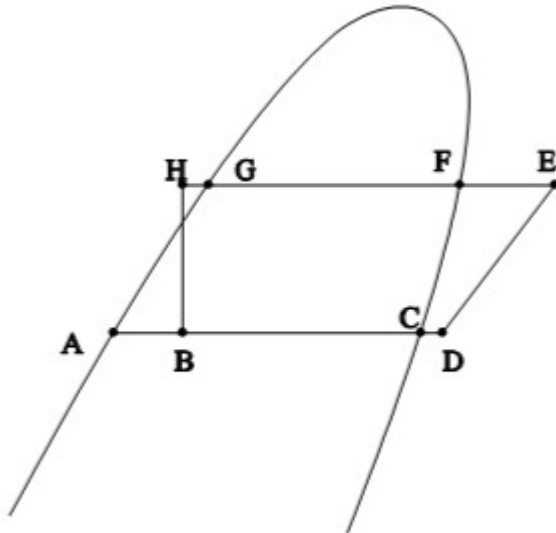
Correct Answer

627.99 margin of error +/- 10

Question 2

1 / 1 pts

Point on Cycle	Enthalpy (btu/lb)	Specific Volume (cuft/lb)
A	15	XXXXXXXXXXXX
B	36	XXXXXXXXXXXX
C	104	XXXXXXXXXXXX
D	113	0.84
E	130	XXXXXXXXXXXX
F	118	XXXXXXXXXXXX
G	41	XXXXXXXXXXXX
H	36	XXXXXXXXXXXX



The compressors used in the shop have the following parameters.
 Calculate the displacement of the compressor and provide the Capacity of the system in BTU/Hr.

Use two decimal places in your calculation.

The stroke of the compressor 1.45 is inches long

The number of Pistons 6

The RPM 1750

The Bore of the Compressor is 2.68 inches Square

Correct!

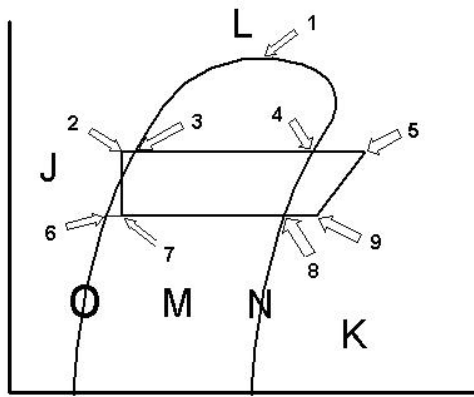
273,361.1

Correct Answer

273,361 margin of error +/- 200

Question 3

1 / 1 pts



The line between # _____ and # _____ represents refrigeration effect.

Correct!

7 & 9

5 & 9

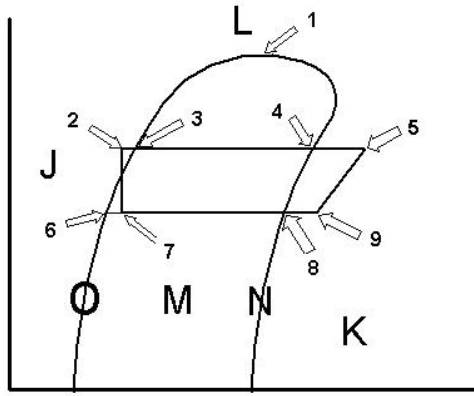
7 & 8

6 & 8



Question 4

1 / 1 pts



The line between # _____ and # _____ represents desuperheating.

6 & 8

7 & 9

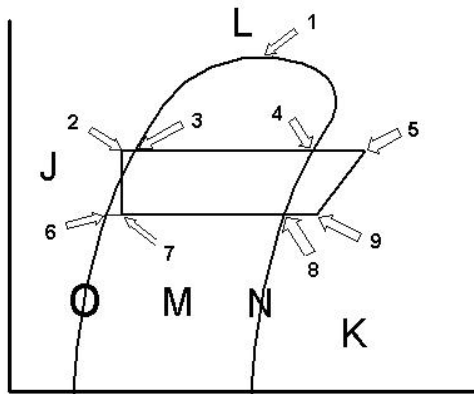
7 & 8

5 & 4

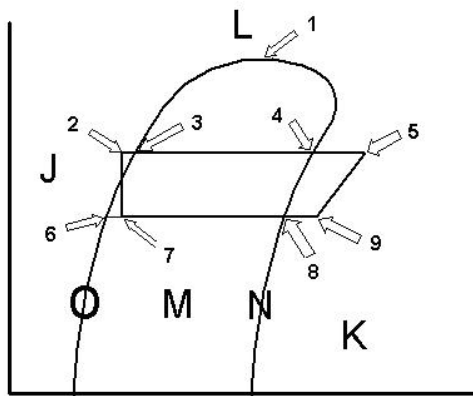
Correct!

Question 5

1 / 1 pts



The line between # _____ and # _____ represents subcooling.

6 & 8 7 & 9 5 & 9**Correct!** 2 & 3**Question 6****1 / 1 pts**

The line between # ____ and # ____ represents the latent heat added to the refrigerant.

 7 & 9 6 & 8**Correct!** 7 & 8 5 & 9

Question 7**1 / 1 pts**

As you increase the temperature of a superheated vapour, its density:

- Stays the same
- None of the above
- Decreases
- Increases

Correct!**Question 8****1 / 1 pts**

Temperature change has the same effect on volume for both a superheated or saturated vapour.

- True
- False

Correct!**Question 9****1 / 1 pts**

Lines of constant _____ determine what percentage of liquid and vapour compose refrigerant in a saturated state.

- Entropy
- Density

Correct! Quality Density**Question 10****1 / 1 pts**

Density = 1 / Specific Volume

Correct! True False**Question 11****1 / 1 pts**

When you run the same compressor at a lower SST, your compressor must do ____ work per ton of cooling.

 Directly Proportional Less The Same More**Correct!**Quiz Score: **11** out of 11