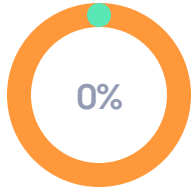


Don't give up now! Trust the process.

Your time: 1 min



Correct

0

Incorrect

42

Next steps

42 missed terms

Practice terms in Learn

Practice your missed terms more until you get them right.



Take a new test

Try another test to boost your confidence.



Your answers

1 of 42

Term 

For R-F, heat removal from a $M > 1$ flow will cause the Mach number to ____.

Give this one a try later!



Skipped

Correct answer

accelerate

2 of 42

Term

In R-F, heat addition always causes a ___ in P_0

Give this one a try later!

Skipped

Correct answer

decrease

3 of 42

Term

What is the key reference condition in the analysis of F-F?

Give this one a try later!

✕ Skipped

Correct answer

✓ M=1 (or sonic)

4 of 42

Term 🔊

The most efficient operational commercial jet from BOeing is the ____.

Give this one a try later!

✕ Skipped

Correct answer

✓ B-787

5 of 42

Term 

The Grumman ___ demonstrated for the first time in the US for the advantages of forward swept wings.

Give this one a try later!

 Skipped

Correct answer

 X-29

6 of 42

Term 

The majority of aerial refueling tankers in US fleet are the Boeing ___

Give this one a try later!

 Skipped

Correct answer

KC-135 or B-707

7 of 42

Term

The new stealth fighter from Lockheed with STOL capability is ____.

Give this one a try later!

Skipped

Correct answer

F-35B

8 of 42

Term

The largest commercial jet ever made was the Airbus ____

Give this one a try later!

✕ Skipped

Correct answer

✓ A-380

9 of 42

Term 🔊

The Lockheed Martin ___ was the first supersonic fighter in the US that went into serial production

Give this one a try later!

✕ Skipped

Correct answer

✓ F-104

Term 

The North American ____ was the first US fighter with swept-back wings that went into serial production.

Give this one a try later!

 Skipped

Correct answer

 F-86

Term 

How does T_0 vary in R-F with heat removal? It ____.

Give this one a try later!

 Skipped

Correct answer

decreases

12 of 42

Term

How does T_0 vary in F-F? It remain the same, because the flow is ____.

Give this one a try later!

Skipped

Correct answer

adiabatic

13 of 42

Term

Can friction in F-F derive a $M > 1$ flow toward Mach one?

Give this one a try later!

✕ Skipped

Correct answer

✓ Yes

14 of 42

Term 🔊

The US strategic bomber, after which all modern commercial aircraft are based was the Boeing ____.

Give this one a try later!

✕ Skipped

Correct answer

✓ B-47

15 of 42

Term 

The first operational stealth fighter in US was the Lockheed ____

Give this one a try later!

 Skipped

Correct answer

 F-117

16 of 42

Term 

Chuck Yeager flew this aircraft to become the first manned supersonic flight:

Give this one a try later!

 Skipped

Correct answer

Bell X-1

17 of 42

Term

The US bomber aircraft after which most commercial jets were created after:

Give this one a try later!

Skipped

Correct answer

B-47

18 of 42

Term

For R-F, heat addition from a $M < 1$ flow will cause the Mach number to

_____.

Give this one a try later!

✕ Skipped

Correct answer

✓ accelerate

19 of 42

Term 🔊

For R-F , heat addition to $M > 1$ flow will cause the Mach number to

Give this one a try later!

✕ Skipped

Correct answer

✓ decrease

Term 

In F-F, how does friction change entropy for a $M < 1$ flow? It will

Give this one a try later!

 Skipped

Correct answer

 increase

Term 

The largest human-rated rocket ever was the NASA ____

Give this one a try later!

 Skipped

Correct answer

Saturn V

22 of 42

Term

The only Boeing tri-jet commercial jet was the Boeing ____.

Give this one a try later!

Skipped

Correct answer

B-727

23 of 42

Term

In R-F, the condition of $M=1$ is called thermal ____.

Give this one a try later!

✕ Skipped

Correct answer

✓ choking

24 of 42

Term 🔊

In R-F, heat addition always causes a/an ___ in T_0 .

Give this one a try later!

✕ Skipped

Correct answer

✓ increase

25 of 42

Term 

Name one of the two branches of the Mollier diagram for F-F:

Give this one a try later!

 Skipped

Correct answer

 subsonic or supersonic

26 of 42

Term 

Can friction in F-F drive a $M > 1$ flow toward Mach one?

Give this one a try later!

 Skipped

Correct answer

Yes

27 of 42

Term

For R-F, heat removal from a $M < 1$ flow will cause the Mach number to

Give this one a try later!

Skipped

Correct answer

decrease

28 of 42

Term

In F-F, "f" is just the non-dimensional version of (use symbol) ____.

Give this one a try later!

✕ Skipped

Correct answer

✓ tau_w (shear stress at a wall)

29 of 42

Term 🔊

The only currently operational US swing-wing aircraft is the North American Rockwell (now Boeing) ____

Give this one a try later!

✕ Skipped

Correct answer

✓ B-1

30 of 42

Term 

The Boeing-designed split winglet is for the new Boeing ____

Give this one a try later!

 Skipped

Correct answer

 B-737 MAX

31 of 42

Term 

The largest rocket engine ever made was for NASA, the Rocketdyne ____.

Give this one a try later!

 Skipped

Correct answer

F-1

32 of 42

Term

In R-F, the condition of $M=1$ corresponds to the condition of ____ entropy.

Give this one a try later!

Skipped

Correct answer

maximum

33 of 42

Term

Currently under construction and testing, the largest NASA rocket ever is ____.

Give this one a try later!

✕ Skipped

Correct answer

✓ SLS

34 of 42

Term 🔊

The only US large military transport with STOL capability is the Boeing ____.

Give this one a try later!

✕ Skipped

Correct answer

✓ C-17

35 of 42

Term 

What is the key reference condition for analysis of R-F?

Give this one a try later!

 Skipped

Correct answer

 M=1

36 of 42

Term 

The world speed record for a manned aircraft is ____.

Give this one a try later!

 Skipped

Correct answer

X-15

37 of 42

Term

The North American Rockwell ___ is the first aircraft to show effective thrust vectoring

Give this one a try later!

Skipped

Correct answer

X-31

38 of 42

Term

The North American ___ was the first US fighter with swept back wings that went into mass production

Give this one a try later!

✕ Skipped

Correct answer

✓ F-86

39 of 42

Term 🔊

The largest twin engine commreical jet ever made is the Boeing ____

Give this one a try later!

✕ Skipped

Correct answer

✓ 777x

40 of 42

Term 

The world speed record by a manned aircraft was the North American

Give this one a try later!

 Skipped

Correct answer

 X-15

41 of 42

Term 

How does P_0 vary in F-F? It ____.

Give this one a try later!

 Skipped

Correct answer

Decreases

42 of 42

Term

Enthalpy (h) versus entropy (s) diagram is the ___ diagram

Give this one a try later!

Skipped

Correct answer

Mollier

