

# Quiz 6

- Due Apr 29 at 11:59pm
- Points 100
- Questions 10
- Available Apr 22 at 2pm - Apr 29 at 11:59pm
- Time Limit 15 Minutes

## Instructions

This quiz is on the hurricanes (lectures 14, chapter 11).

- Time limit: 15 minutes
- The timer continues even if you exit the quiz
- One attempt
- Open book/note

Quizzes have no due dates, but all quizzes must be completed by April 29, 2024.

This quiz was locked Apr 29 at 11:59pm.

## Attempt History

	Attempt	Time	Score
LATEST	<a href="#">Attempt 1</a>	15 minutes	90 out of 100

Score for this quiz: 90 out of 100

Submitted Apr 29 at 7:20pm

This attempt took 15 minutes.

Question 1

10 / 10 pts

What is the difference between a typhoon and a cyclone?

Correct!

☒ Cyclones occur in the Indian Ocean and southern hemisphere; typhoons occur in northwest Pacific Ocean.

☐ all of these

☐ Typhoons occur in the northwestern Pacific Ocean; cyclones occur in the Indian Ocean and southern hemisphere.

☐ none of these

☐ Cyclones affect continental regions; typhoons affect oceanic regions.

Question 2

10 / 10 pts

If a hurricane is traveling at 20 mph and has a wind speed of 125 mph, what is the effective windspeed in the front right quadrant of the storm? (enter the number only)

Correct!

145

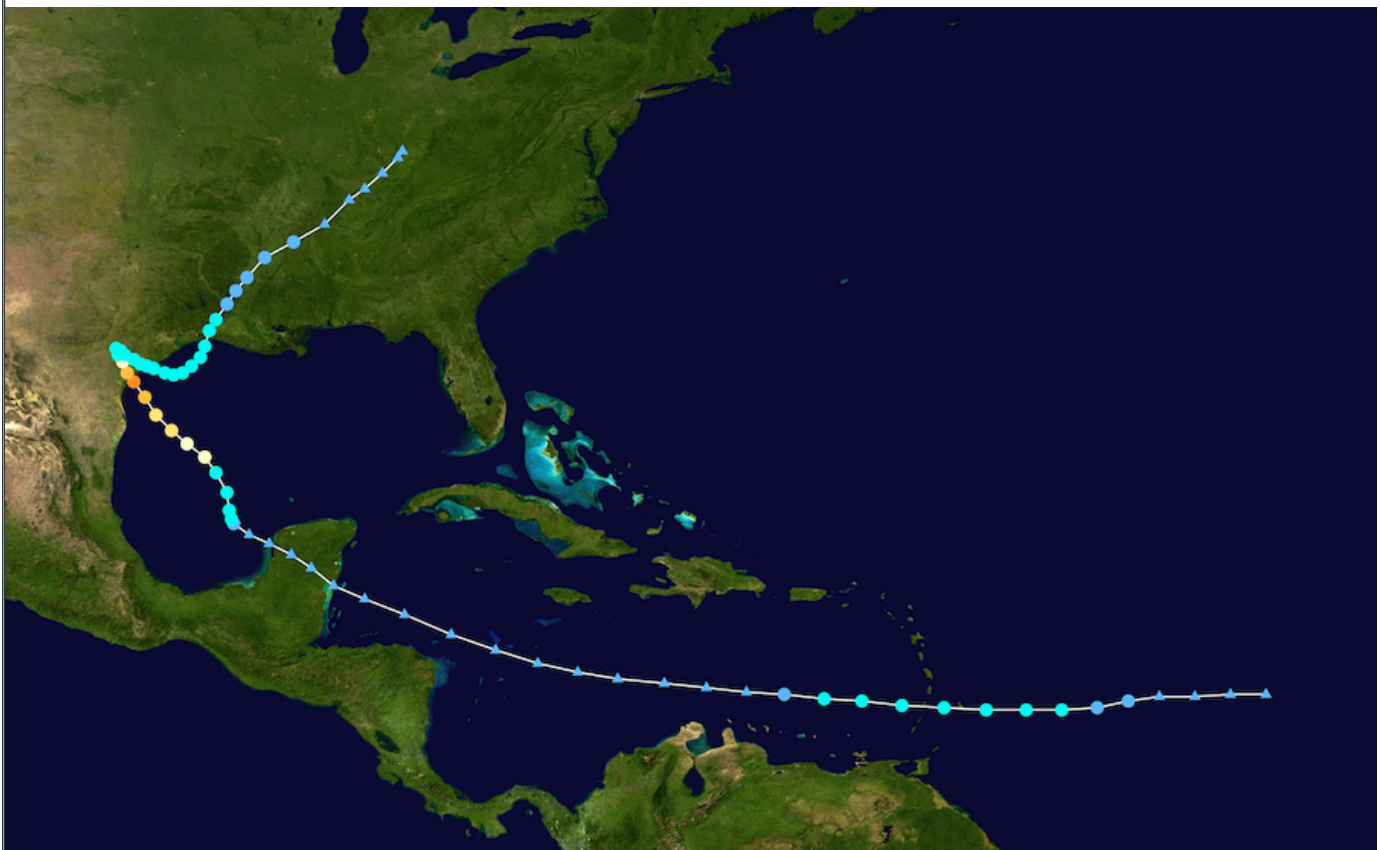
Between 145 and 145



Question 3

10 / 10 pts

The image below shows the track of Hurricane Harvey in 2017. What was the most likely size of the Bermuda High?



Correct!

☒ Large

☐ Medium

☐ Small



Question 4

10 / 10 pts

The main source of energy for a hurricane is \_\_\_\_\_.

Correct!

- ☒ latent heat released by condensing water
- ☐ solar radiation
- ☐ air moving from high pressure to low pressure
- ☐ temperature differences between the air masses making up the storm



Question 5

10 / 10 pts

A hurricane warning or tropical storm warning is issued by the National Hurricane Center in the United States

- ☐ to areas expected to experience hurricane-force or tropical storm-force winds within the next 24 hours.
- ☐ to areas expected to experience hurricane-force or tropical storm-force winds within the next 48 hours.

Correct!

- ☒ to areas expected to experience hurricane-force or tropical storm-force winds within the next 36 hours.
- ☐ to areas expected to experience hurricane-force or tropical storm-force winds within the next 12 hours.



Question 6

10 / 10 pts

The Saffir-Simpson scale for hurricane intensity is based on

- ☐ maximum diameter of the storm.
- ☐ minimum pressure at the storm center.

Correct!

- ☒ maximum sustained wind speed.
- ☐ maximum relative humidity at a recording station.
- ☐ maximum hourly rainfall at a recording station.



Question 7

10 / 10 pts

Is it possible for large thunderstorm clusters forming in equatorial regions (<5° latitude) to evolve into hurricanes?

☐ none of these

☐ Yes, equatorial regions are the most common place on Earth for hurricanes to originate.

☐ Although possible, there is less chance of a hurricane originating in equatorial regions.

Correct!

☒ No; Coriolis forces at the equator are too weak to initiate rotation, so hurricanes never form in these areas.



Question 8

10 / 10 pts

In degrees Fahrenheit, what is the minimum ocean water temperature needed for a hurricane to develop. (enter the number only)

Correct!

79

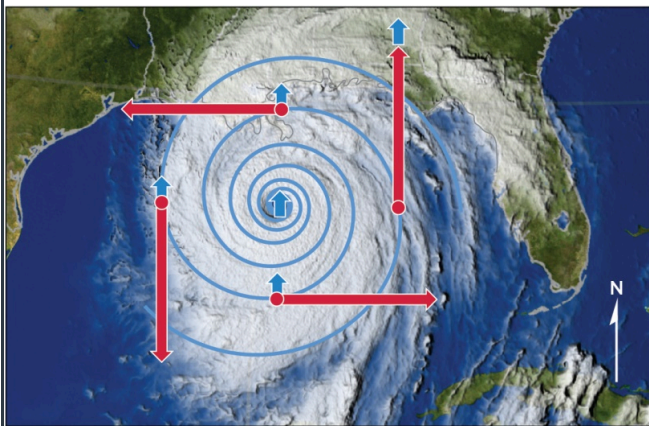
Between 79 and 79



Question 9

0 / 10 pts

As illustrated in the figure below, where would the most damaging effects from wind be expected to occur?



☐ along the western edge of the storm

Correct Answer

☐ along the eastern edge of the storm

You Answered

☒ along the northern edge of the storm

<input type="radio"/> along the southern edge of the storm
⋮
Question 10
10 / 10 pts
Tropical disturbances evolve into tropical depressions when thunderstorm clusters originating in tropical latitudes
<input type="radio"/> none of these
<input type="radio"/> have maximum sustained winds of 37–61 miles per hour.
Correct!
<input checked="" type="radio"/> all of these
<input type="radio"/> last for a day or more.
<input type="radio"/> circulate around low-pressure centers.
Quiz Score: 90 out of 100