

Name \_\_\_\_\_

Date \_\_\_\_\_

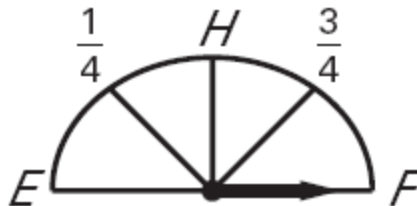
### Open-ended Task: Geometry Chapter 2

**Directions:**

To receive full credit you must do the following:

1. Show OR describe each step of your work, even if you did it in your head (“mental math”) or used a calculator,  
AND
2. Write an explanation stating the mathematical reason(s) why you chose each of your steps.

**Question:** A full 20 gallon gas tank has a gauge as shown.



You travel until you have a  $\frac{1}{4}$  of a tank of fuel remaining

A. How many degrees did the gauge turn?

B. How many gallons of gas are left in the tank?

**C.** You continue traveling until the tank is empty. You fill up the tank to  $\frac{7}{8}$  full.

How many degrees did the gauge turn while filling up?

**D.** How many gallons did you get?