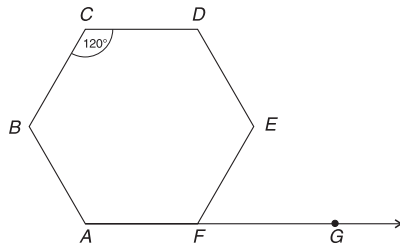


Use the regular hexagon below to answer question 21.



21. How many degrees are in $\angle EFG$?

- A. 80°
- B. 240°
- C. 60°
- D. 120°

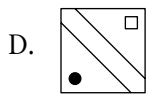
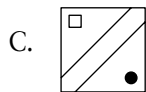
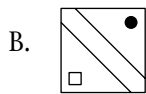
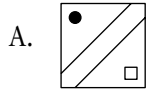
Reporting Category/Substrand for Item 21: **Geometry and Measurement/Geometry (p. 144)**

Mathematics, Grade 8

22. The following figure is to be rotated 90° clockwise.



What will the figure look like after the rotation?



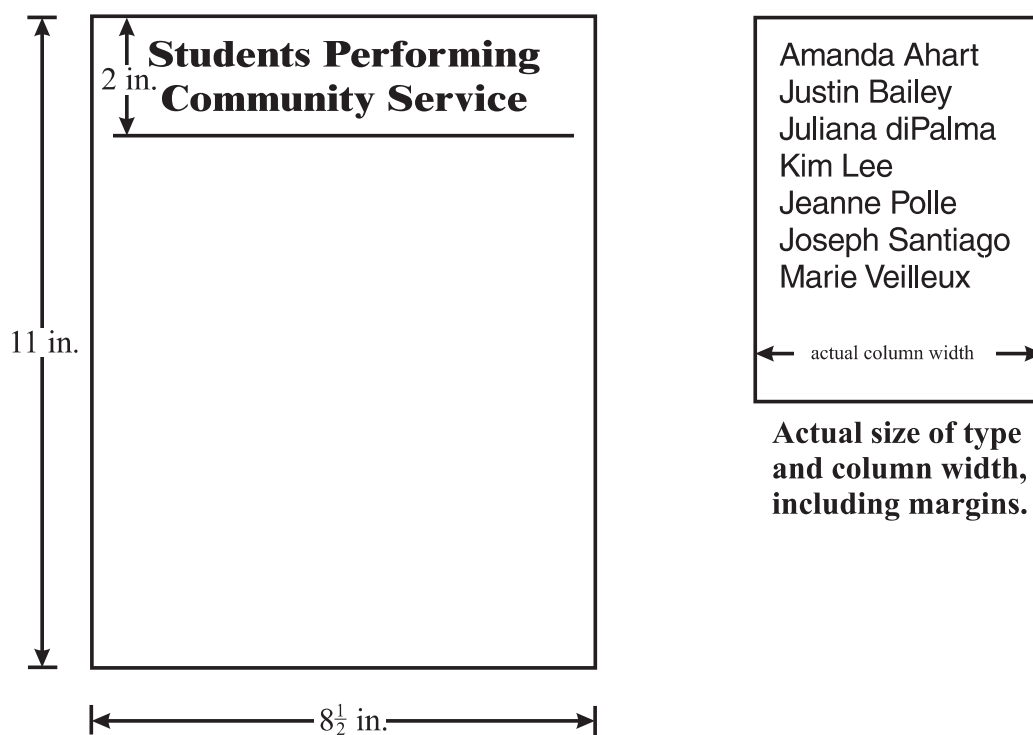
Reporting Category/Substrand for Item 22: *Geometry and Measurement/Geometry (p. 144)*

Session 2, Open-Response Question

Use your ruler to answer this open-response question.

23. Jarrod is the editor of the school newspaper. In the next issue, a page will be devoted to a list of the students who perform community service. Jarrod is planning how to arrange the names.

The first figure below tells the size of the page and the headline. The second figure shows the actual size of type that will be used for the students' names and the actual width of each column.



There are 175 students who performed community service. Jarrod wants to plan the page so that

- the page has the greatest number of columns possible, and
 - the columns are as close to the same length as possible.
- a. What is the greatest number of columns that Jarrod can put on the page? Show or describe how you found your answer.
 - b. How many names should he put in each column so that the columns are of equal length or as close to equal length as possible? Assume each name will fit on one line in a column.
 - c. How long will each column of names be? Show or describe how you found your answer.

*Reporting Category/Substrand for Item 23: **Geometry and Measurement/Measurement (p. 144)***

24. Jasmine needs to reduce the height of a picture from 3 inches to 2 inches so it will fit in the school yearbook. The new height is what percent of the original height?

A. $66\frac{2}{3}\%$

B. $33\frac{1}{3}\%$

C. 50%

D. 75%