

6th – 8th Grade:

Costumes

Use the following information about buying fabric to help you answer the questions.

- Fabric from a store it is sold by the yard (yes you can request $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$ yard)
- The fabric has a width of either 36, 60 or 72 inches

1. Molly is making herself a costume. The skirt needs to be 28 inches around and 30 inches in length. The top needs a total of 700 square inches of the same fabric. The fabric has a width of 60 inches. How many yards of fabric should Molly get? Justify your answer.

2. Mateo needs a total of 9 feet of fabric to create his vampire costume. The fabric has a width of 72 inches, and he purchased 3 yards of fabric. Did Mateo purchase the correct amount of fabric? Justify your answer.

3. Paul has a budget of \$12 to make his Halloween costume. He spent \$4 on make-up and props. He needs to purchase his fabric to make a cape. He has not decided upon how big the cape must be but it needs to be at least 2.5 feet wide and preferably greater than 3 feet long. He has two options of fabric that he likes. Option 1: cost \$8 per yard and has a width of 72 inches. Option 2: cost \$6.50 and has a width of 60 inches. Which fabric option do you recommend and how much money would Paul have left to make other purchases? Justify your answer.
