Name: _____ Date: _____

Wrapping Paper

Kyra is wrapping a birthday present in a box that is 12 inches wide, 8 inches long and 3 inches deep. She has two different pieces of birthday wrapping paper. She hopes that one of them is large enough to completely wrap her box, because they are different patterns. One sheet is 24 in. by 16 in. and the second sheet is 32 inches by 12 inches.

Could Kyra use either piece of wrapping paper to completely wrap the present?
- If so, explain how you know each piece of paper will work.
- If not, explain how you know that one piece will work and one piece will not work or that both pieces will not work.

Use numbers, words and pictures or diagrams to explain your best thinking.

Name: _____Possible Solution_____ Date: _____

Wrapping Paper

Kyra is wrapping a birthday present in a box that is 12 inches wide, 8 inches long and 3 inches deep. She has two different pieces of birthday wrapping paper. She hopes that one of them is large enough to completely wrap her box, because they are different patterns. One sheet is 24 in. by 16 in. and the second sheet is 32 inches by 12 inches.
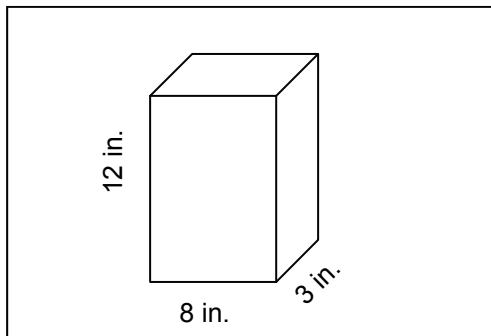
Could Kyra use either piece of wrapping paper to completely wrap the present?
- If so, explain how you know each piece of paper will work.
- If not, explain how you know that one piece will work and one piece will not work or that both pieces will not work.

Use numbers, words and pictures or diagrams to explain your best thinking.
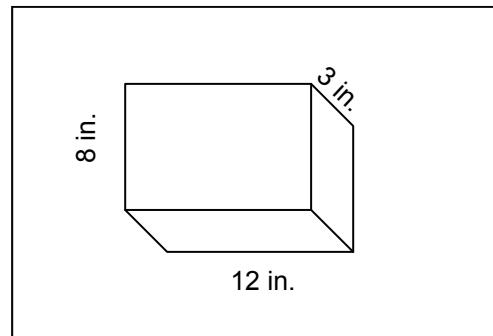
ANSWER: Both pieces of paper will completely wrap the present.

24 inches

16 inches

12 in.

8 in.

3 in.

32 inches

12 inches

8 in.

3 in.

12 in.

- Place the box on the wrapping paper as shown and center it.
- Bring the 16 inch ends of the wrapping paper up around the box and secure. This will fit and overlap because she needs to cover 8 in. x 3 in. x 8 in. x 3 in. which is 22 inches. She'll have a 2 inch overlap to tape the paper.
- Then fold the ends down. She needs to cover 3 inches deep on each end. Since the box is 12 inches, she'll have an extra 4 inches of paper, which means 2 inches on each end. When she folds the ends, she'll have 2 inches from the top and 2 inches from the bottom, which gives an overlap to tape.

- Place the box on the wrapping paper as shown and center it.
- Bring the 12 inch ends of the wrapping paper up around the box and secure. This will fit and overlap because she needs to cover 12 in. x 3 in. x 12 in. x 3 in. which is 30 inches. She'll have a 2 inch overlap to tape the paper.
- Then fold the ends down. She needs to cover 3 inches deep on each end. Since the box is 8 inches, she'll have an extra 4 inches of paper, which means 2 inches on each end. When she folds the ends, she'll have 2 inches from the top and 2 inches from the bottom, which gives an overlap to tape.