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a Write an inequality to represent the possible scarves and hats she could knit.



b Using graph paper or a graphing calculator, graph the inequality. You will need to change the window settings. Hint: Use  $X_{min} = 0$ ,  $X_{max} = 20$ ,  $Y_{min} = 0$ ,  $Y_{max} = 15$ .

In a graphing calculator, type your equation using fractions. To change a decimal to a fraction in a graphing calculator: When the decimal is on the screen, go to **MATH**, **FRAC**, then **ENTER**.

c If Min-ji decided to make only scarves, what is the greatest number of scarves that she could knit?

d If Min-ji decided to make only hats, what is the greatest number of hats that she could knit?

e If Min-ji sold her scarves for \$8 and her hats for \$5, with the yardage she has, would she make more money selling only scarves, only hats, or both? Explain your thinking.

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