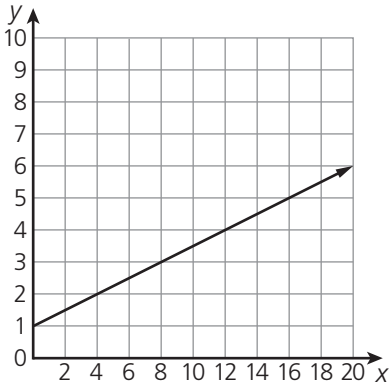
Session 1

This session contains 32 multiple-choice questions. Fill in the circle for your answer to each multiple-choice question.

You may use a ruler and a protractor during this session. You may also use a calculator during this session.

Now turn the page and begin.

9. The graph below shows a relationship between x and y.



Is the relationship between x and y in this graph proportional?

Ⓐ Yes, because the line is straight.

Ⓑ Yes, because the ratio between (0, 1) and (4, 2) is the same.

Ⓒ No, because the line does not go through (0, 0).

Ⓓ No, because the line should go through (16, 8).

10. What is the value of this expression?

$\frac{2}{3}(-48) + (-6.3)(-4.2)(-8)$

Ⓐ 243.68

Ⓑ 179.68

Ⓒ -179.68

Ⓓ -243.68

Session 2

This session contains six multiple-choice questions and ten constructed-response items. Fill in the circle for your answer to each multiple-choice question. Write your answer for each constructed-response item.

You may use a ruler and a protractor during this session. You may also use a calculator during this session.

Now turn the page and begin.

40. Mr. Rank makes and sells furniture. To find the price for a piece of furniture, he combines the cost of his materials and an hourly rate of $22.50 for his labor. Then he increases that number by 125%. For a certain table, Mr. Rank used $85.50 in materials. He spent 5 hours making the table. What was the price Mr. Rank charged for this table?

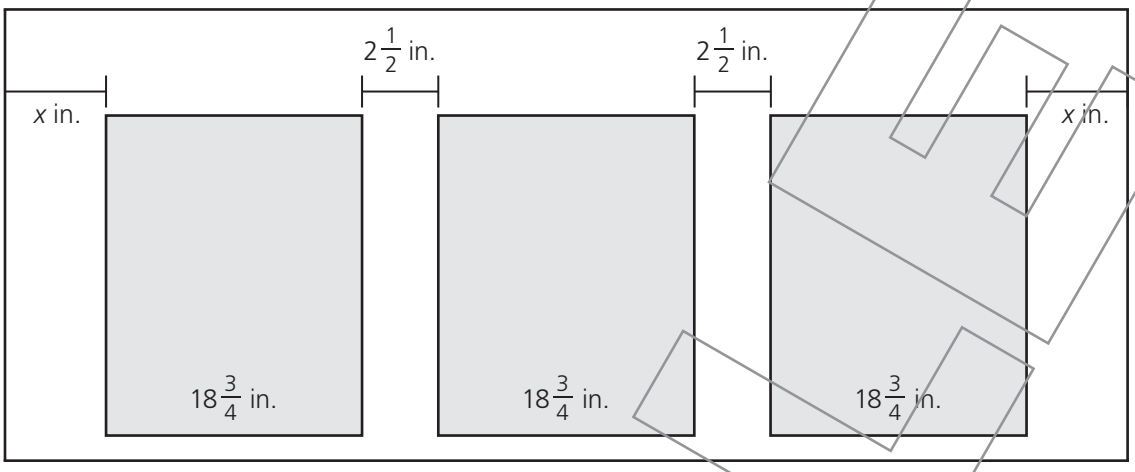
Answer $_____

41. Simplify this expression to the product of a whole number and the sum of two unlike terms.

$$\frac{1}{3}(-27m + 63n) - (-18m + 15n)$$

Answer _____

44. Neil plans to hang three canvas prints on his living room wall. The diagram below shows how Neil would like to hang the prints.

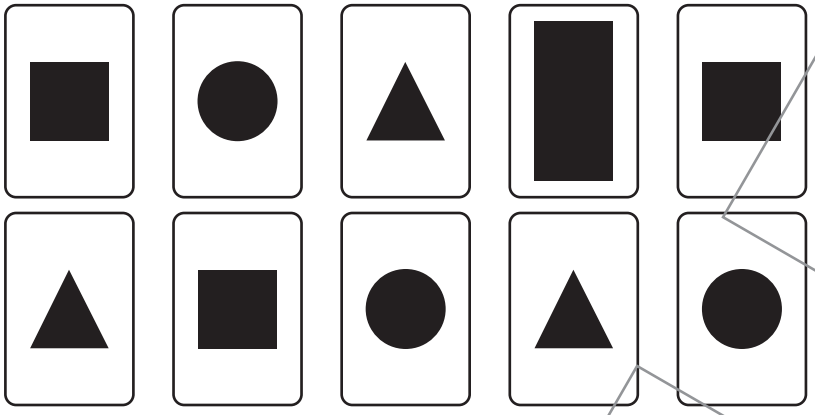


The wall has a length of 74 inches. The length on either side of the set of canvases is x inches. What is the value of x?

Show your work.

Answer _____ inches

45. Ramon put these cards in a bag.



Ramon will choose a card at random and then replace it in the bag 75 times. How can you predict the number of times Ramon will choose a shape that has four sides?

Explain your answer.

_____

_____

_____

_____

Ramon chose a card 75 times and recorded the results below.

Result	Number of Times
Square	𝍸 𝍸 𝍸 //
Triangle	𝍸 𝍸 𝍸 𝍸 𝍸
Rectangle	////
Circle	𝍸 𝍸 𝍸 𝍸 𝍸 ////

Use Ramon's results to find the experimental probability that the next card he chooses will be either a circle or a triangle.

Answer _____