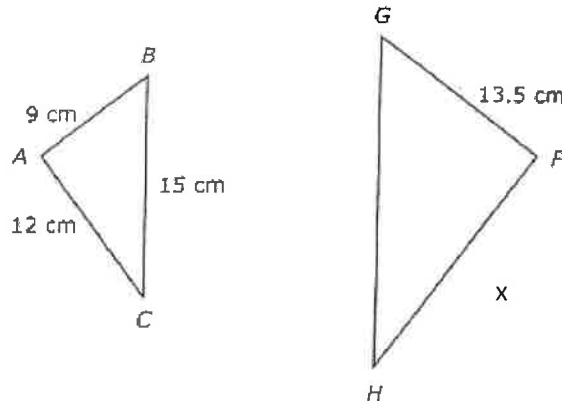


Final Review

1. Violet needs $5\frac{1}{2}$ yards of fabric to make a quilt. She has one piece of fabric that is $1\frac{1}{2}$ yards and another piece of fabric that is $2\frac{1}{4}$ yards. How many more yards of fabric does Rebecca need to make the quilt?
2. A doctor has an annual income of \$105,620. The income tax the doctor has to pay is 5%. What is the amount of income tax in dollars and cents that the doctor has to pay?
3. Michael buys 4 packets of watermelon seeds. Each packet contains 16 seeds. He planted 1 packet of seeds and 13 seeds sprouted. If he plants all 4 packets, how many seeds will sprout?
4. Is $x=14$ a solution to the equation $2(x-3)=22$?
5. Theodore has two bags of marbles. The first bag contains 3 red marbles, 2 blue marbles and 6 green marbles. The second bag contains 2 red marbles, 6 blue marbles and 4 green marbles. Theodore randomly selects 1 marble from each bag. What is the probability he will select a blue marble from each bag?
6. Kira downloaded 132 picture from her cell phone to her computer. These pictures took up 264 megabytes of space on her computer. Each picture took up the same amount of space. How many megabytes do 35 of these pictures take up?
7. A marker holder is shaped like a triangular prism. The height is 6 cm and the volume is 108 cm^3 . What is the area of the base of the pencil holder?

8. A study of a population of 600 birds revealed that 6 out of every 90 birds in the population have spots on their back. Based on this information, how many in the population do NOT have spots?

9. Triangle ABC is similar to triangle FGH. What is the value of x in centimeters?



10. Jimmy paid \$52.00 for 5 movie tickets. If each movie ticket costs the same, how much is each ticket?

11. Sammy has $2\frac{3}{4}$ bags of soil to put her in her garden. Each bag of soil will covers 98.7 ft^2 . How many square feet will Stephanie be able to cover is she uses all these bags?

12. What is the solution to this equation?

$$12.56 = 4.96 + 2x$$

13. The distance between two cities on a map is 1.75 centimeters. The maps uses a scale in which 1 centimeter represents 20 kilometers. What is the actual distance between the two cities?

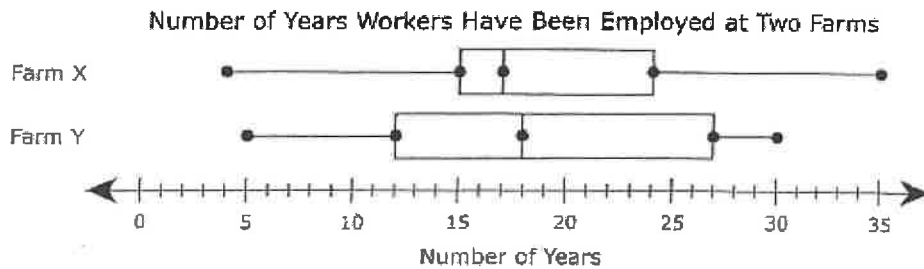
14. The table shows the prices of some breakfast items at a restaurant. Samantha orders two slices of bacon, one egg and one class of orange juice.

The sales tax she pays is \$0.48. She paid for her breakfast with a \$10 bill. How much change should she get back?

Breakfast Menu

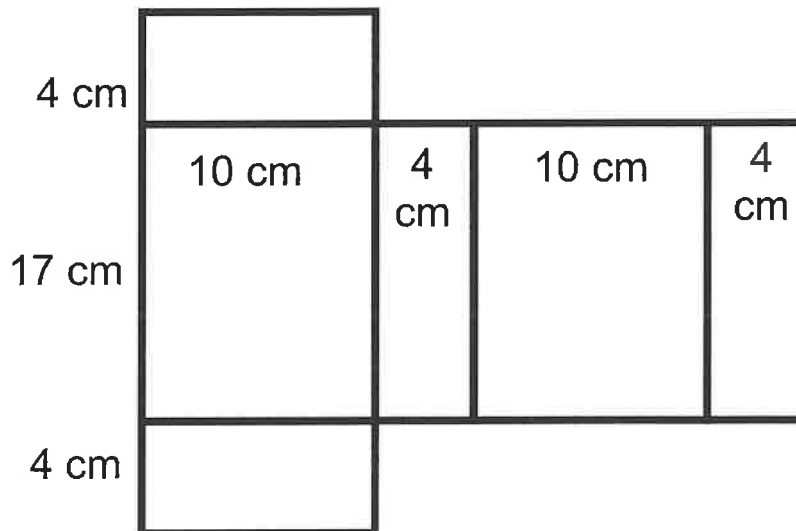
| Item | Price |
|-----------------------|--------|
| One egg | \$1.69 |
| Slice of bacon | \$1.49 |
| Glass of orange juice | \$1.09 |

15. What is the range, median, quartile 1 and quartile 3 for both box plots?

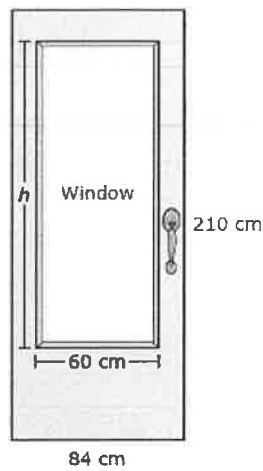


16. Two identical cubes have side lengths of 3 cm. What is the combined volume of the cubes?

17. What is the total surface area?



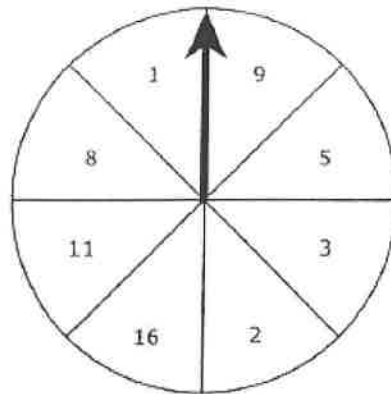
18. The diagram shows a door that has a window in it. The front faces of the door and the window are similar rectangles that have the dimensions shown.



What is h , the height of the window in centimeters?

19. A circular tablecloth has a radius of 1.5 feet. Kylee is sewing a piece of ribbon around the edge of the tablecloth. If Kyle has exactly enough ribbon, what would the length of the ribbon be?

20. The spinner shown has eight congruent sections.



If the spinner is spun 120 times, what is a reasonable prediction for the number of times the spinner will land on an odd number?

21. In Oscar's monthly budget, each category is assigned a certain percentage of his monthly income. Oscar's monthly income is \$2,250.

Monthly Budget

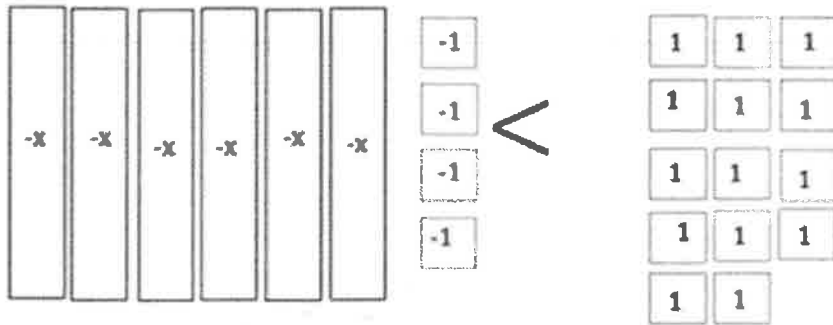
| Category | Percentage |
|----------------|------------|
| Savings | 16% |
| House payment | 35% |
| Telephone | 5% |
| Utilities | 6% |
| Car payment | 17.5% |
| Car insurance | 6.5% |
| Life insurance | 3% |
| Emergencies | 11% |

Which statements are true?

- F Oscar puts \$360 of his monthly income into savings.
- G Less than \$900 of Oscar's monthly income is for his house payment and life insurance.
- H Oscar budgets \$485 of his monthly income for telephone, utilities, and emergencies.
- J More than \$530 of Oscar's monthly income is for his car payment and car insurance.

22.

Develop and solve the inequality below!



23. Due to a rise in the cost of gas, Larry's Pizza increases their delivery fee from \$1.50 to \$1.75. What is the percent increase in the delivery fee?

24. Lawrence's father gave him 200 baseball cards. Each week, Lawrence purchases 25 baseball cards to add to his collection.

Which inequality can be used to find w , the number of weeks after starting his collection when Lawrence will have more than 750 baseball cards in his collection?

A $200w + 25 < 750$

B $25w + 200 < 750$

C $200w + 25 > 750$

D $25w + 200 > 750$

25. A lawn sprinkler sprays inside a circle with a 12-foot radius. Which expression is best used to find how much of the lawn can be watered by the sprinkler?

A. $\pi \times 12$

B. $2 \times \pi \times 12$

C. $\pi \times 6^2$

D. $\pi \times 12^2$