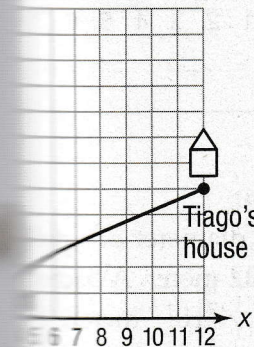


describes the solution for

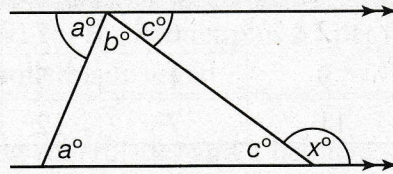
$$3) = 5x - 2.5$$

Franklinton below, the
the origin (0, 0) and each
1 kilometer.



meters north and
of the museum. If
directly from his house
one day, how far will he

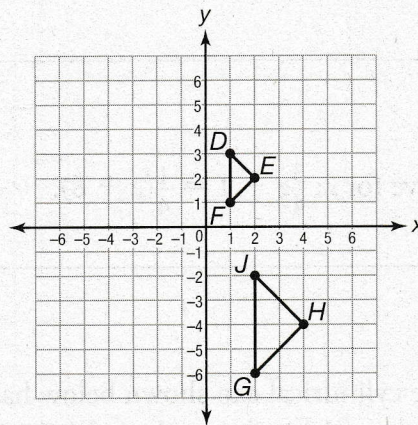
50. The triangle below has angles measuring a , b , and c degrees and an exterior angle measuring x° . Carlos drew two parallel lines and used what he knows about angles formed when parallel lines are cut by a transversal to find two other angle measures.



Using the information above, which expression is equivalent to x° ?

- A. $180^\circ - a^\circ$ C. $a^\circ + b^\circ$
B. $180^\circ - b^\circ$ D. $a^\circ + c^\circ$

51. Which sequence could be used to show that $\triangle DEF$ is similar to $\triangle GHJ$?



- A. dilation of $\triangle DEF$ by a scale factor of 2 followed by a reflection across the x -axis
B. dilation of $\triangle DEF$ by a scale factor of 2 followed by a reflection across the y -axis
C. dilation of $\triangle DEF$ by a scale factor of 3 followed by a reflection across the x -axis
D. dilation of $\triangle DEF$ by a scale factor of 3 followed by a reflection across the y -axis

52. A survey of students in a class explored the relationship between gender and which of three summer Olympics sports students most enjoyed watching.

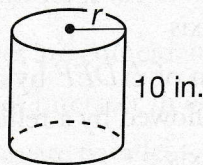
	Track and			
	Gymnastics	Field	Soccer	Total
Boys	2	6	7	15
Girls	9	1	5	15
Total	11	7	12	30

If a girl is chosen from the class at random, what is the probability that her favorite sport to watch is gymnastics?

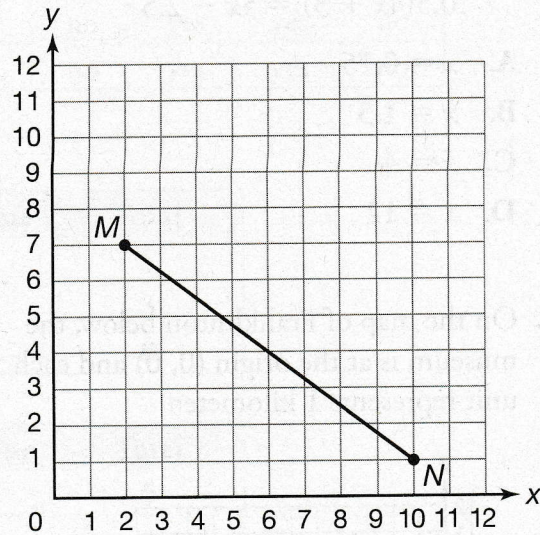
53. Estimate the value of $2\sqrt{2}$ to the nearest tenth.

54. Solve for z : $\frac{3}{4}z - 1 = \frac{1}{4}(z + 8)$.

55. The cylindrical can shown below has a height of 10 inches and a volume of 250π cubic inches. What is its radius, r ?



56. What is the length, in units, of \overline{MN} on the coordinate grid below?



57. The diameter of a presidential \$1 coin is 0.002 meter. A bacterium has a diameter of 5×10^{-7} meter. About how many bacteria that size would fit across the diameter of the coin?



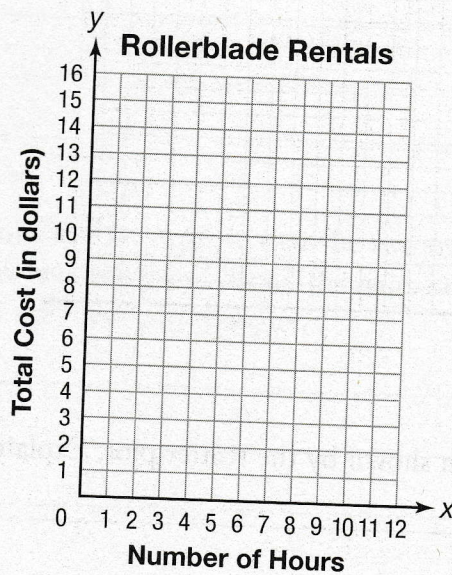
Session 2

58. Aiden wants to rent rollerblades when he goes to the park. He also needs to rent a helmet. Rates for two rental shops are shown below.

Skate Heaven
\$3 for the helmet plus \$2 per hour for rollerblade rental

Rent-a-Rama
\$1 for the helmet plus \$3 per hour for rollerblade rental

- A. Let y represent the total cost, in dollars, of renting rollerblades and a helmet. Let x represent the number of hours for the rental. Write a system of equations to represent this problem situation. Then graph the system on the coordinate grid below.



- B. For how many hours would Aiden need to rent rollerblades in order for the total cost to be the same at both shops? What would that total cost be? Use the solution for the system of linear equations to explain your answers.
