Learning Goal: I can use Pythagorean Theorem to calculate the length of any missing side of a right triangle in a word problem or on a coordinate plane.
Meta de Aprendizaje: Puedo usar el teorema de Pitágoras para calcular la longitud de cualquier lado faltante de un triángulo rectángulo en un problema de palabra o en un plano de coordenadas.

Language Goal: I can discuss with a partner the difference between a slope problem and a Pythagorean Theorem problem on a coordinate plane, then write our explanation.
Lenguaje Objetivo: Puedo discutir con un compañero la diferencia entre un problema de pendiente y un problema de Teorema de Pitágoras en un plano de coordenadas, luego escribir nuestra explicación.

PYTHAGOREAN THEOREM FLOWCHART


DIRECTIONS: Answer the following problems. Use the flowchart if necessary. (Responde las siguientes problemas. Utilice el diagrama de flujo si es necesario.)

1. After talking with his coach, Chad ran 14 yards across the football field and then ran 48 yards up the football field before his coach called him back to the sidelines, as shown in the diagram.


What is the shortest distance Chad can run to return to his coach on the sidelines?

## ANSWER:

$\qquad$
2. A pool table measure 4 feet by 8 feet. What is the distance, to the nearest tenth, from one corner pocket to the opposite corner pocket?

3. Leslie is decorating a present with ribbon. She plans to decorate the present like shown below.


4 in.

6 in.
To the nearest inch, about how much ribbon will Leslie use to decorate the present?

ANSWER: $\qquad$
4. A ladder that is 10 feet tall is leaned against a house. The ladder reaches 8 feet up the house. How far away from the house is the bottom of the ladder? Draw a picture!

## ANSWER:

$\qquad$
5. What is the distance between the two points?

## ANSWER:

$\qquad$

6. What is the distance between the two points?

ANSWER: $\qquad$

7. Gwendolyn placed a 10-foot ladder against the side of her house so that the base of the ladder was 3 feet from the base of the house, as shown in the diagram below.


Which measurement in feet is closest to $d$, the distance from the top of the ladder to the ground?

F $\quad 10.4 \mathrm{ft}$
G 7.0 ft
H 6.5 ft
J 9.5 ft
8. What is the slope of the line?

## ANSWER:

$\qquad$

9. What is the distance between the 2 points?

10. A baseball diamond is shown in the picture. If a player is standing on $1^{\text {st }}$ base and another player is standing on $3^{\text {rd }}$ base, what distance is between the players?

ANSWER: $\qquad$

11. Raul bought a flat screen television. The screen measures 45 inches on the diagonal. The base of the screen is 36 inches long. What is the height of the television screen? Draw a picture!

ANSWER: $\qquad$
12. What is the distance between the two points?


ANSWER: $\qquad$
13. What is the slope of the line?

ANSWER: $\qquad$

What is the $y$-intercept of the line?


ANSWER: $\qquad$

What is the equation of the line?

ANSWER: $y=$ $\qquad$

