

Indirect Measure & Similar Figures Stations

20 station questions
5 extension activities

1.

Groundhog Stats
Height: 3 ft.
Shadow Length: 2 ft.

What is the height of the tree?

2.

$b = ?$

$n = ?$

19.

$k = ?$

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6.

Are the figures similar?

20.

Groundhog Stats
Height: 2.5 ft
Shadow Length: 1 ft

What is the height of the tower?

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- Choose an Activity!
1. Use a ruler, protractor, and a sheet of paper to create 3 rectangles the same size. Want a challenge? Make 3 triangles.
 2. Use Activity Sheet 1 to create a groundhog and a tree, showing how to use similar figures to find the height of the tree.
 3. Use Activity Sheet 3 to create a groundhog and a tower, showing how to use similar figures to find the height of the tower.
 4. Use Activity Sheet 4 and create a groundhog and a tree, showing how to use similar figures to find the height of the tree.
 5. Use Activity Sheet 5 to create a groundhog and a tree, showing how to use similar figures to find the height of the tree.

Groundhog Stats
Height:
Shadow Length:

Groundhog Stats
Height:
Shadow Length:

Groundhog Stats
Height:
Shadow Length:

Draw 2 similar pictures in the grid below.

Activity Sheet 5

Indirect Measure Poster

Draw a similar figure for each shape below.

Activity Sheet 3

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Indirect Measure Comic Strip

Indirect Measure and Similar Figures Stations

Suggested Use:

Position the 20 question cards around the classroom.

Pass out the student answer sheet.

Either group students or have them complete individually.

Have students start at different cards to spread them out.

Students can move at their own pace or per your directions.

Once students complete all 20 questions and turn in their

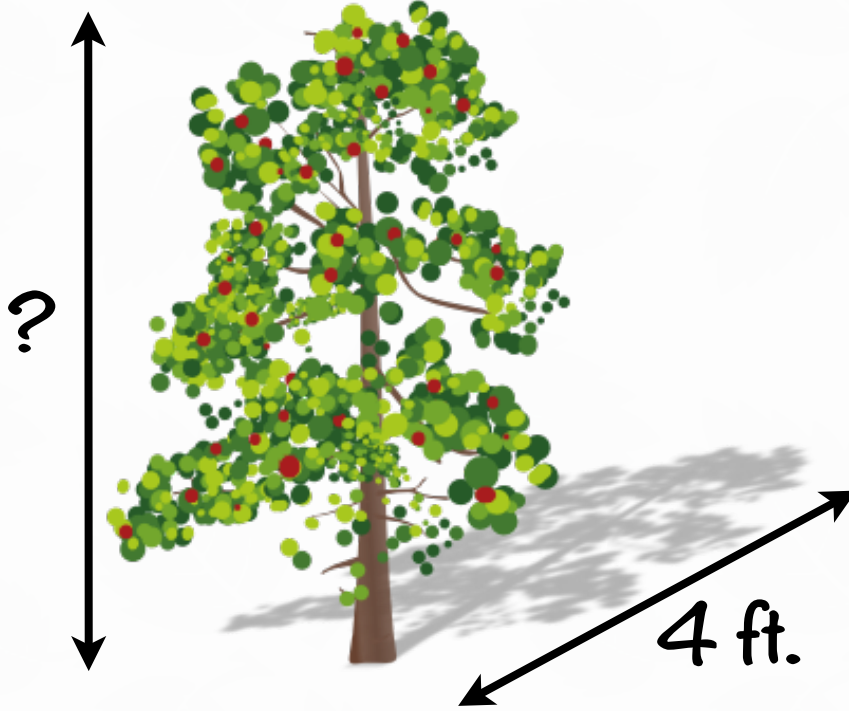
answer sheet, they can choose from the 5 activities provided.

1.

Groundhog Stats

Height: 3 ft.

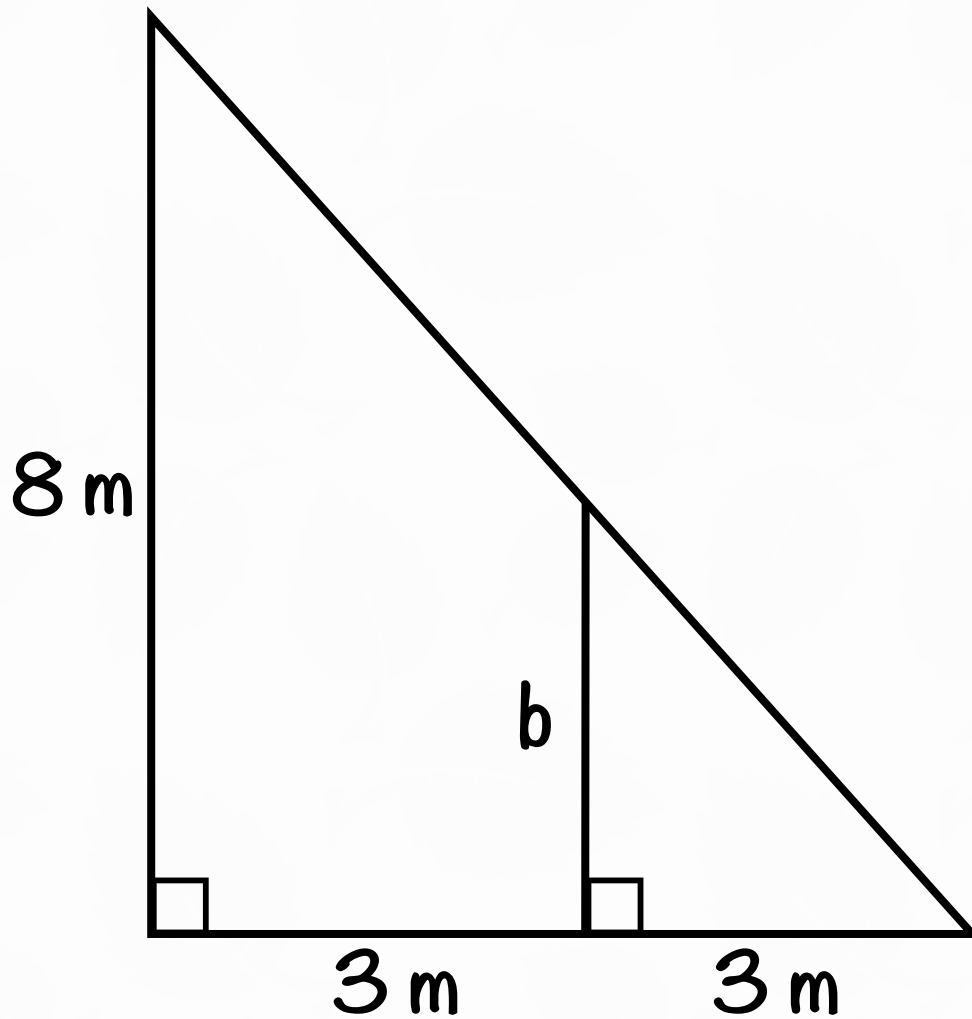
Shadow Length: 2 ft.



What is the height of the tree?

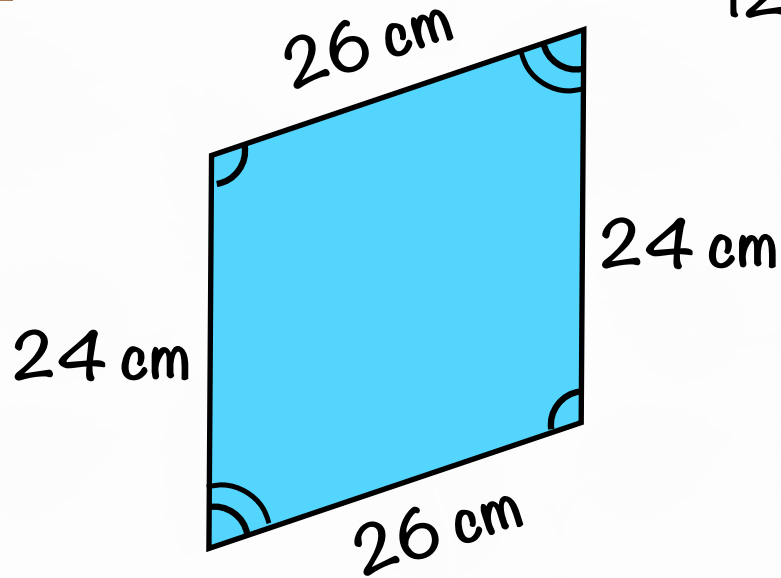
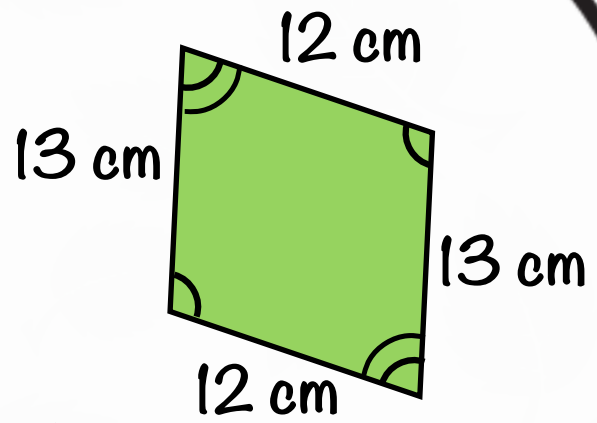
2.

$b = ?$



3.

Are the figures similar?



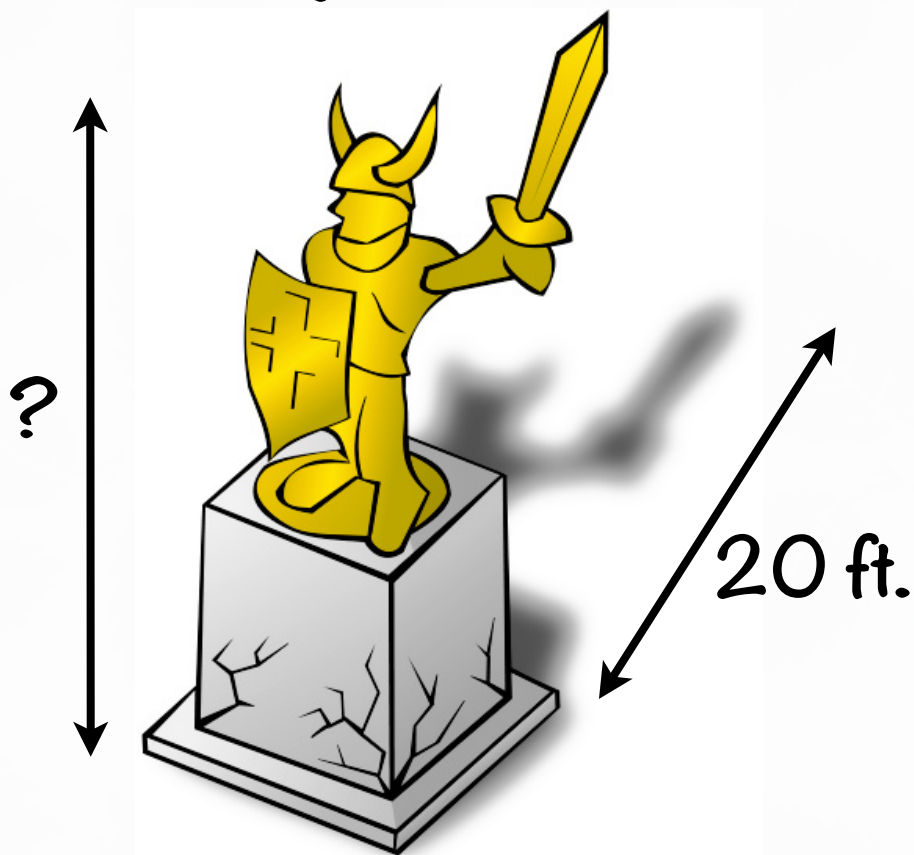
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4.

Groundhog Stats

Height: 3 ft.

Shadow Length: 4 ft.



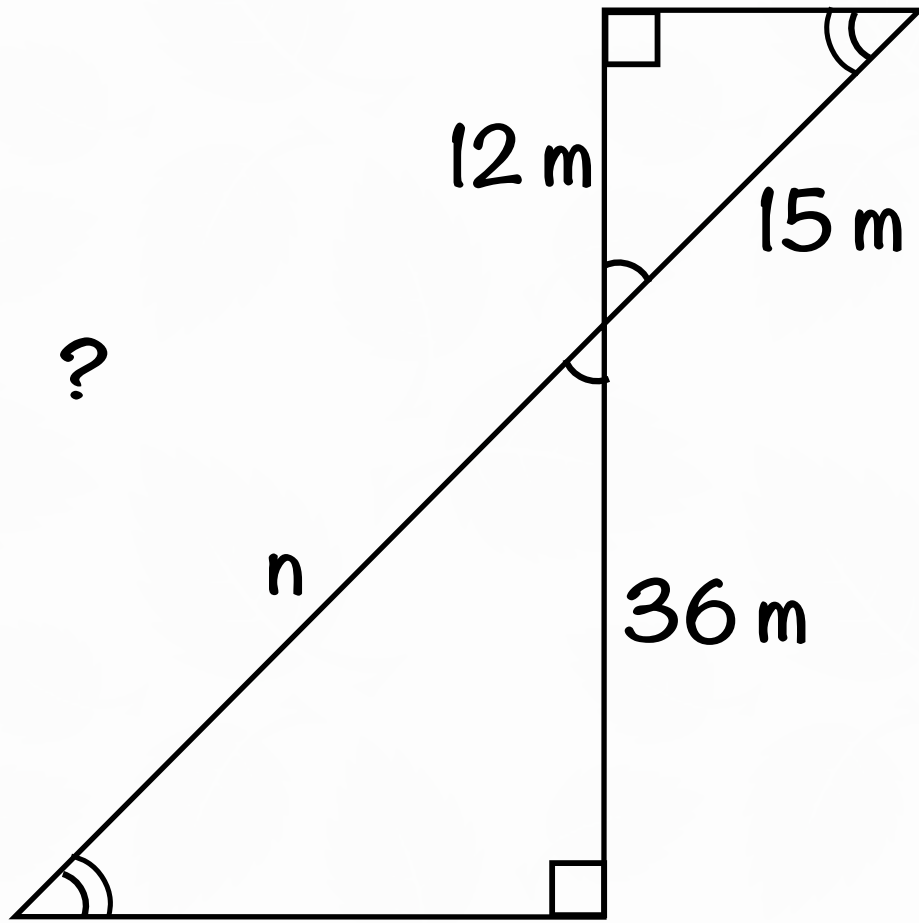
What is the height of the statue?



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5.

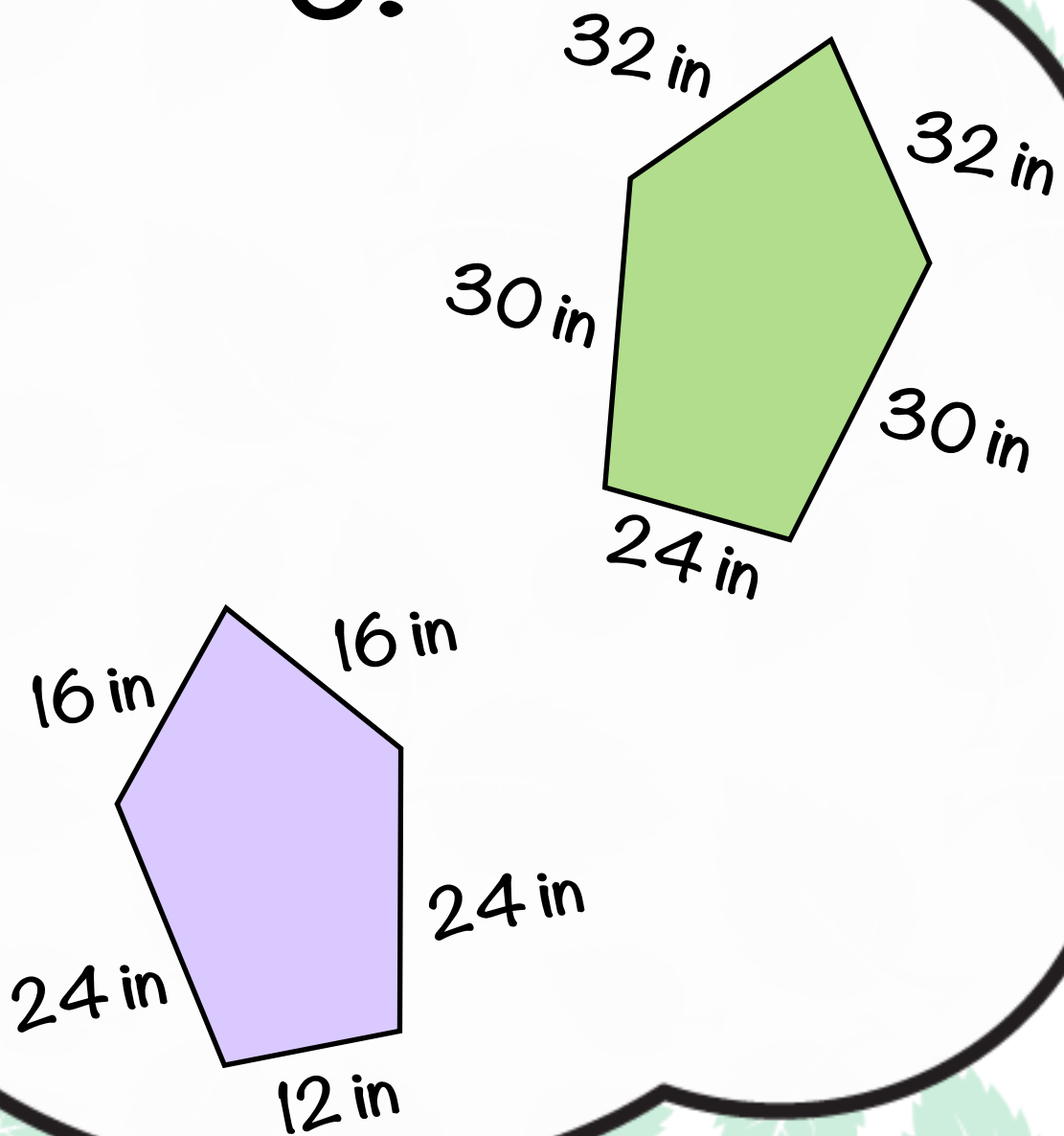
$n = ?$



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6.

Are the figures similar?



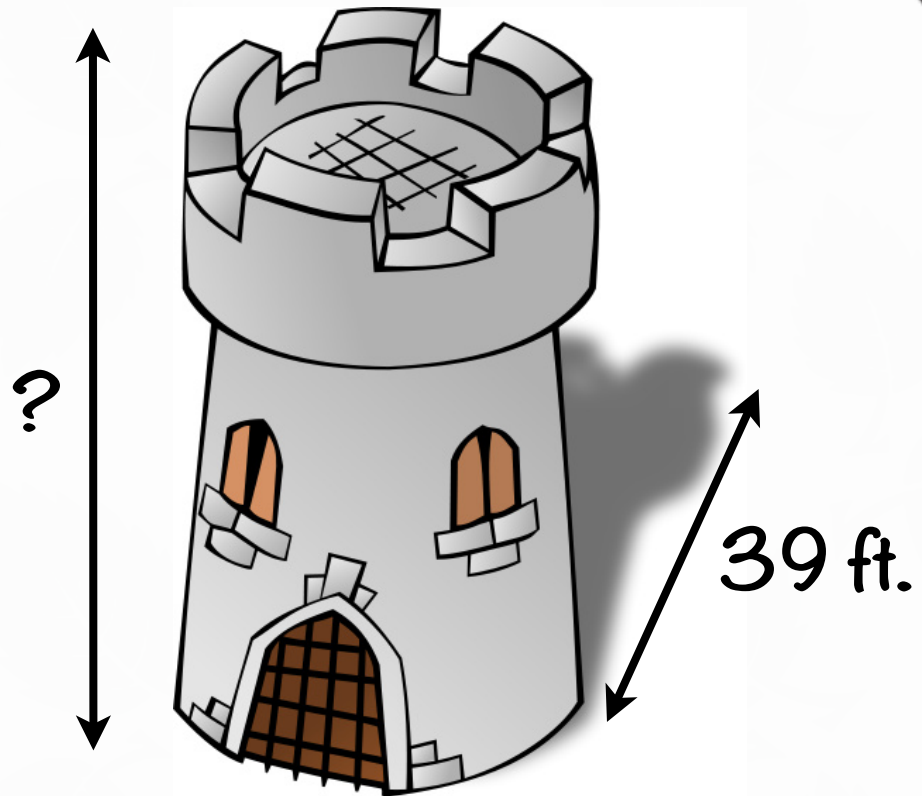
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7.

Groundhog Stats

Height: 2 ft

Shadow Length: 3 ft

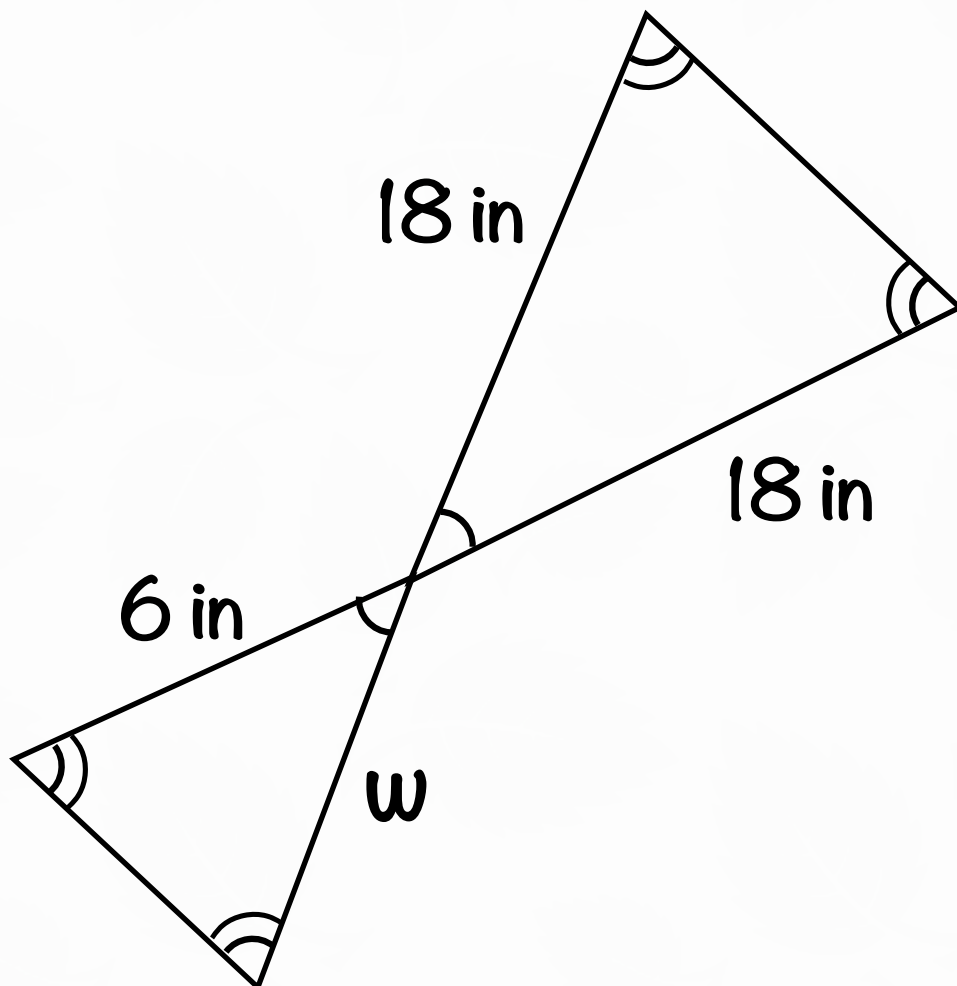


What is the height of the castle?

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8.

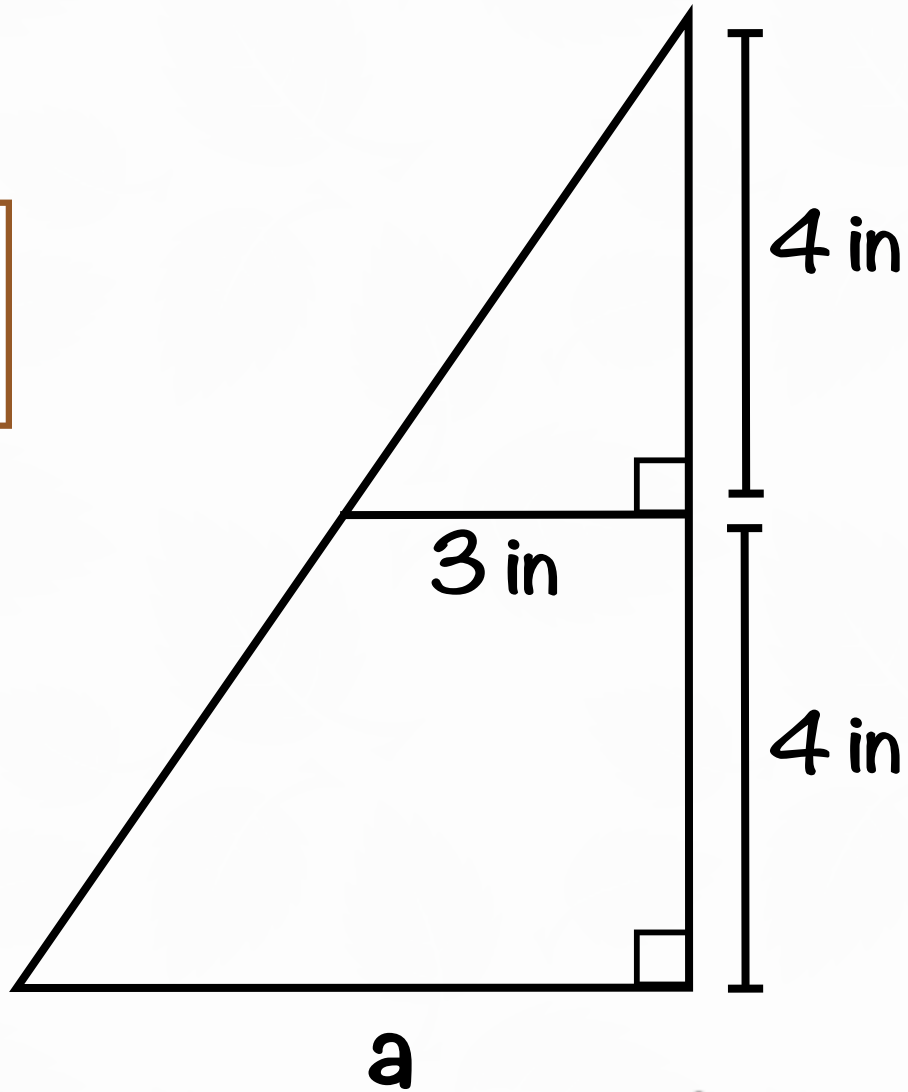
$w = ?$



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9.

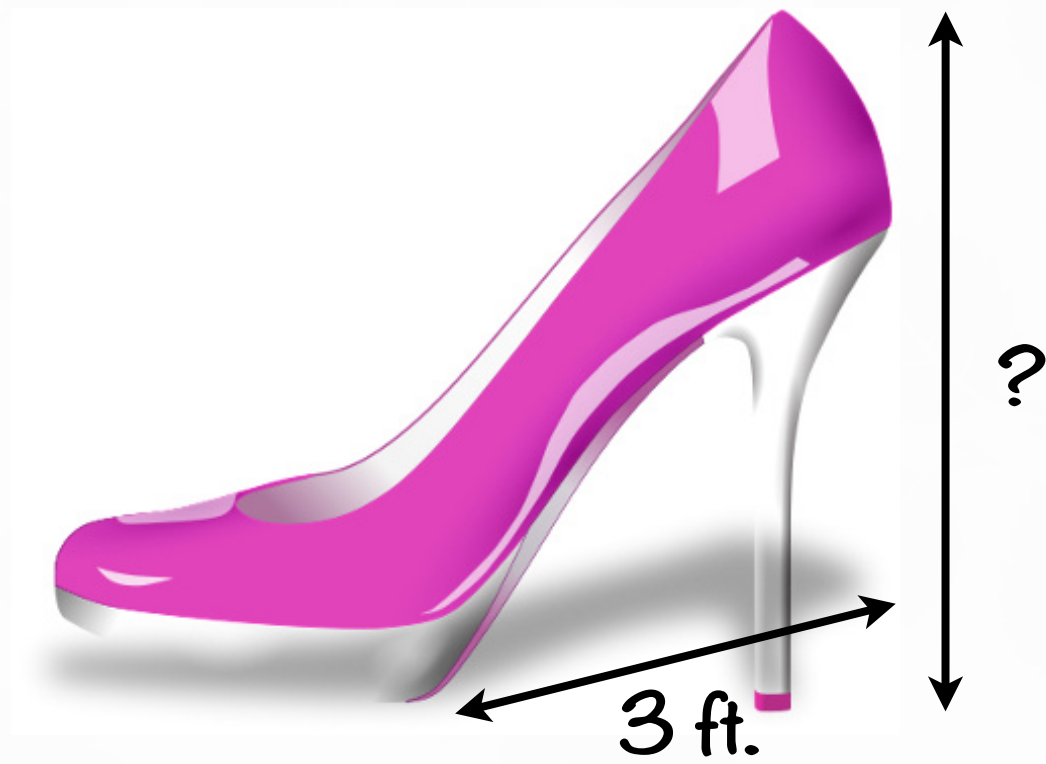
$a = ?$



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10.

Groundhog Stats
Height: 2.5 ft
Shadow Length: 1.5 ft

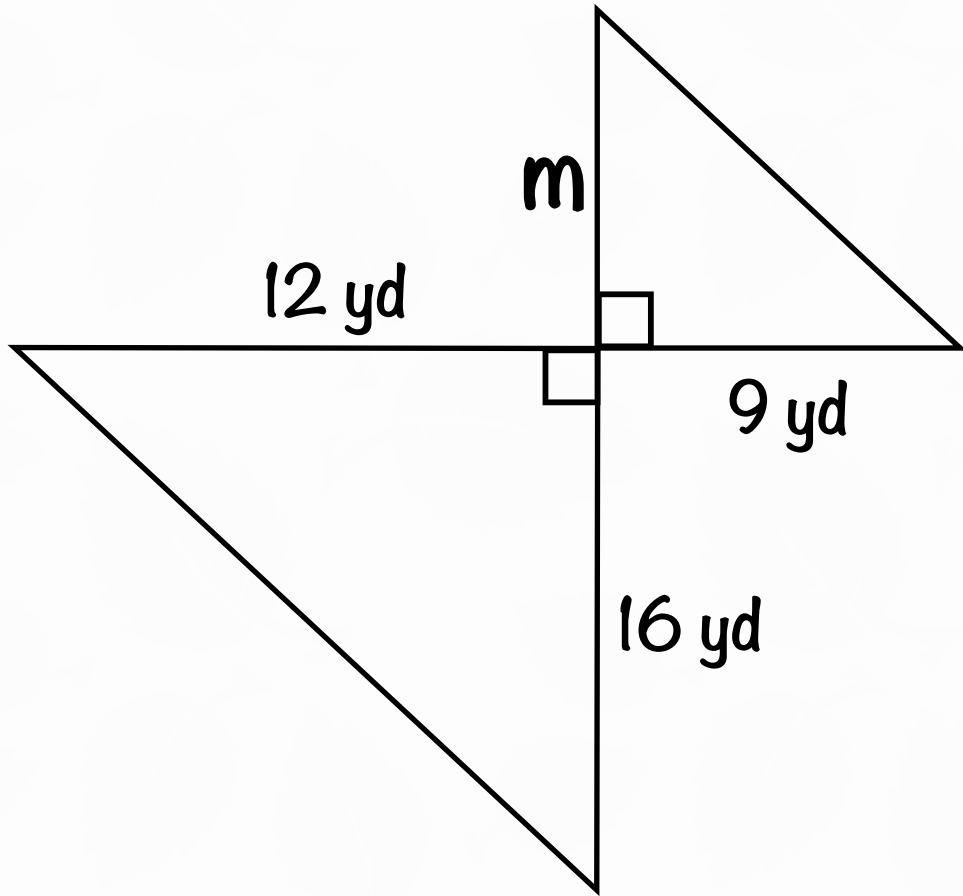


What is the height of the giant shoe?

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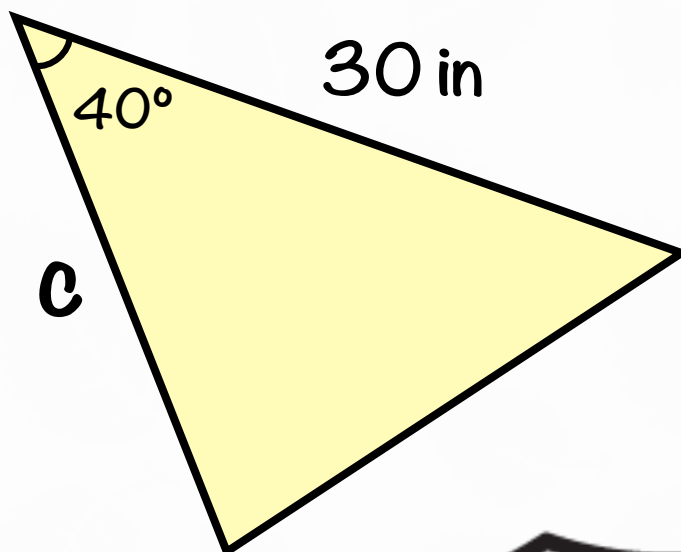
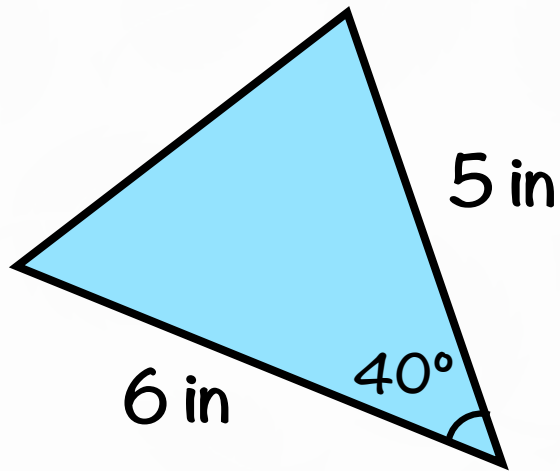
11.

$m = ?$



12.

$c = ?$

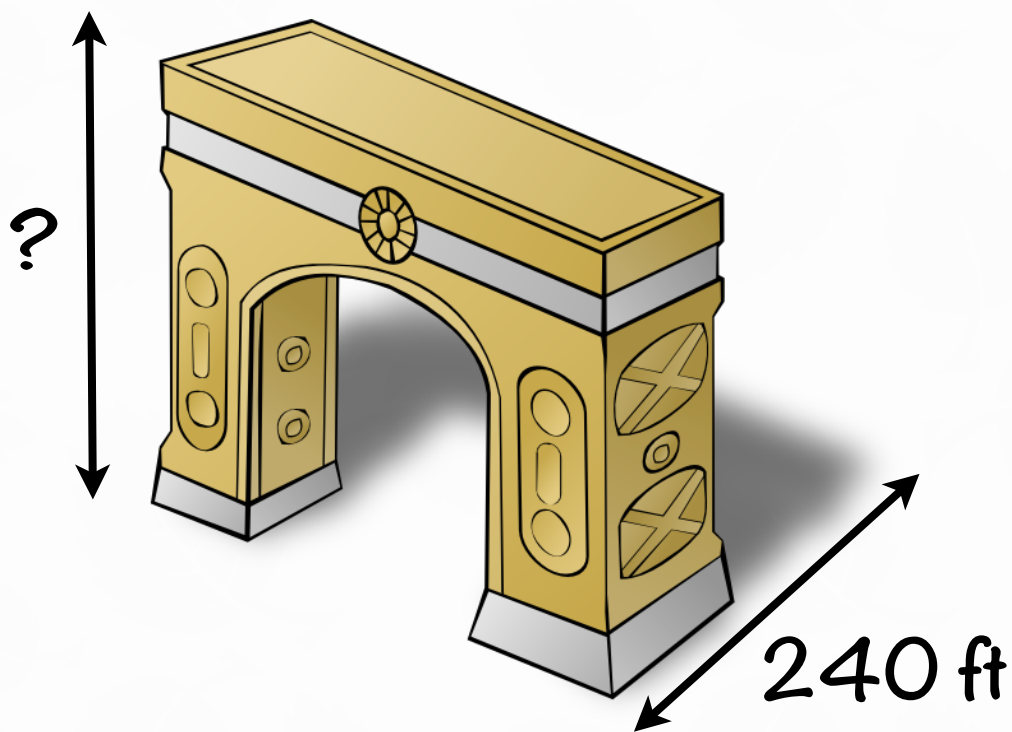


13.

Groundhog Stats

Height: 2 ft.

Shadow Length: 10 ft.



What is the height of the structure?

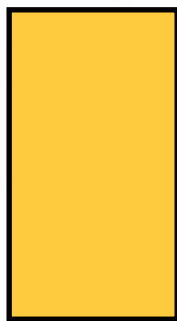
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14.

$x = ?$



7 km



14 km



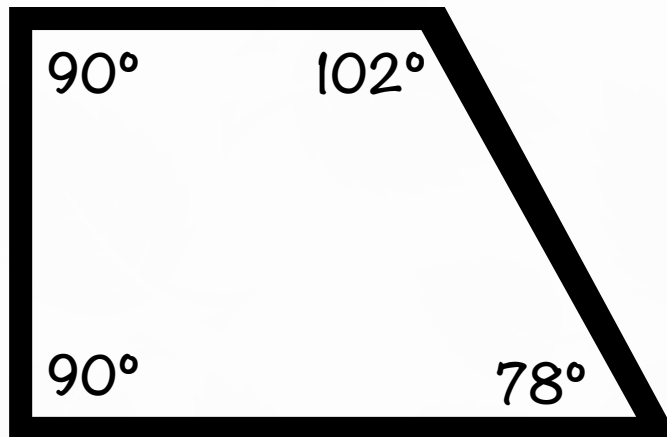
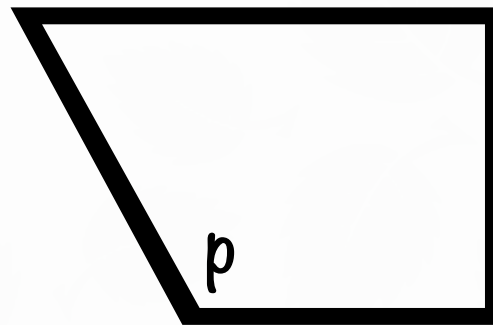
9 km

These figures are similar.

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15.

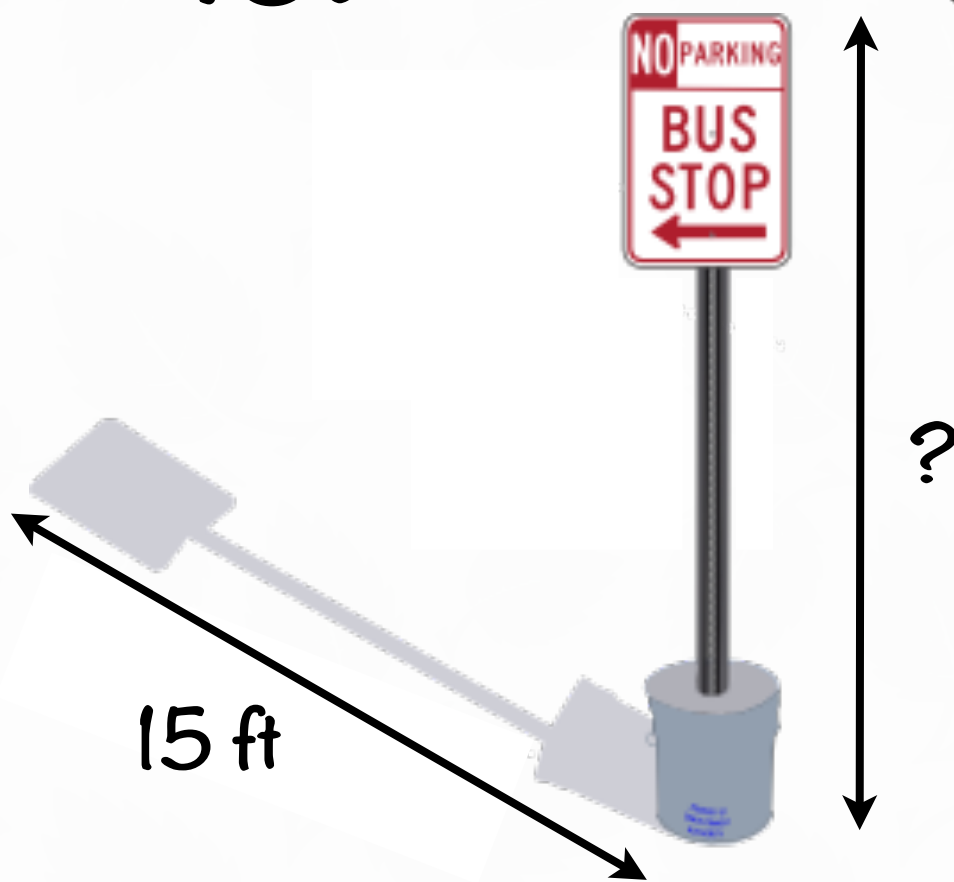
$p = ?$



These figures are similar.

16.

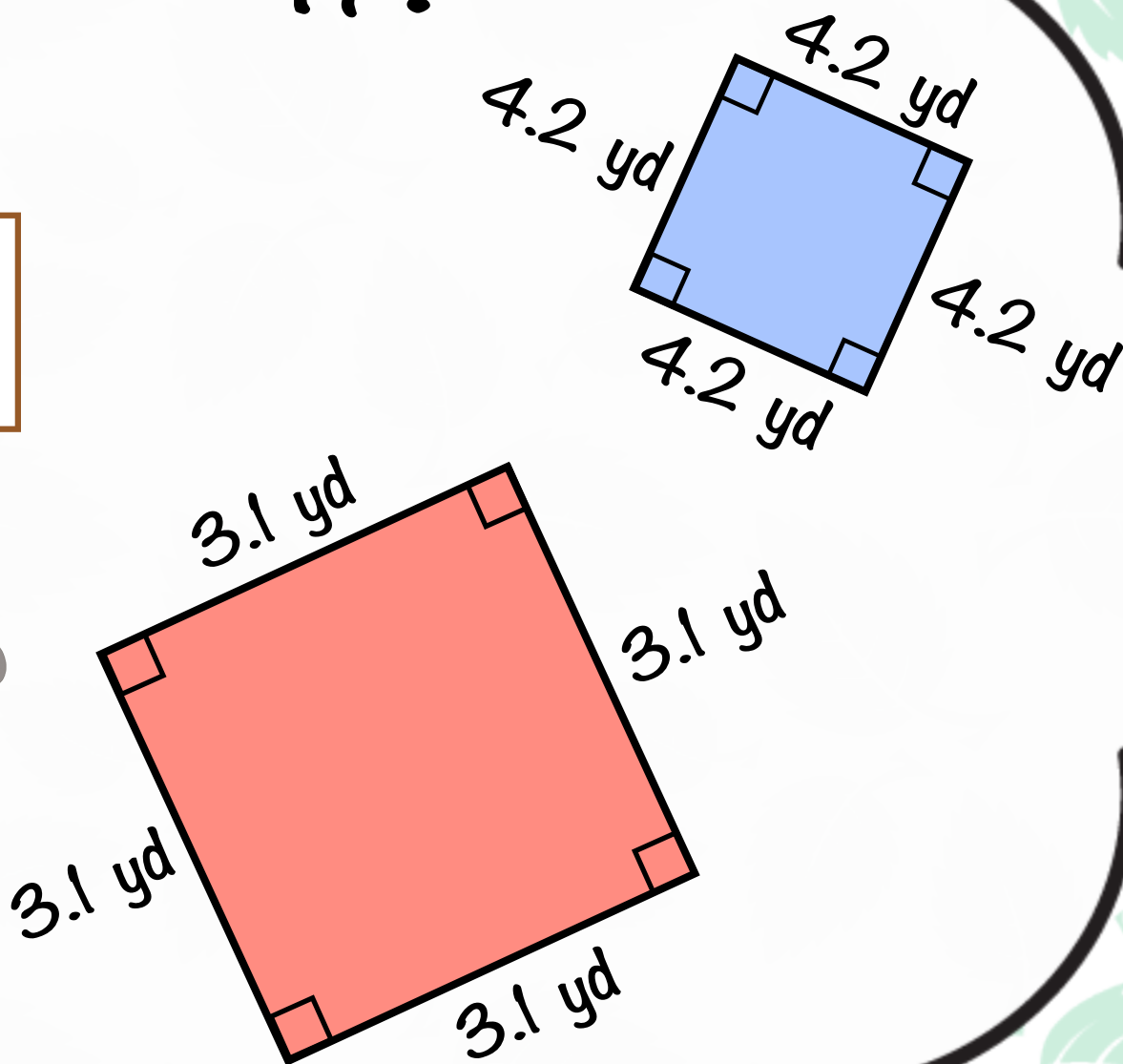
Groundhog Stats
Height: 2.5 ft.
Shadow Length: 5 ft.



What is the height of the sign?

17.

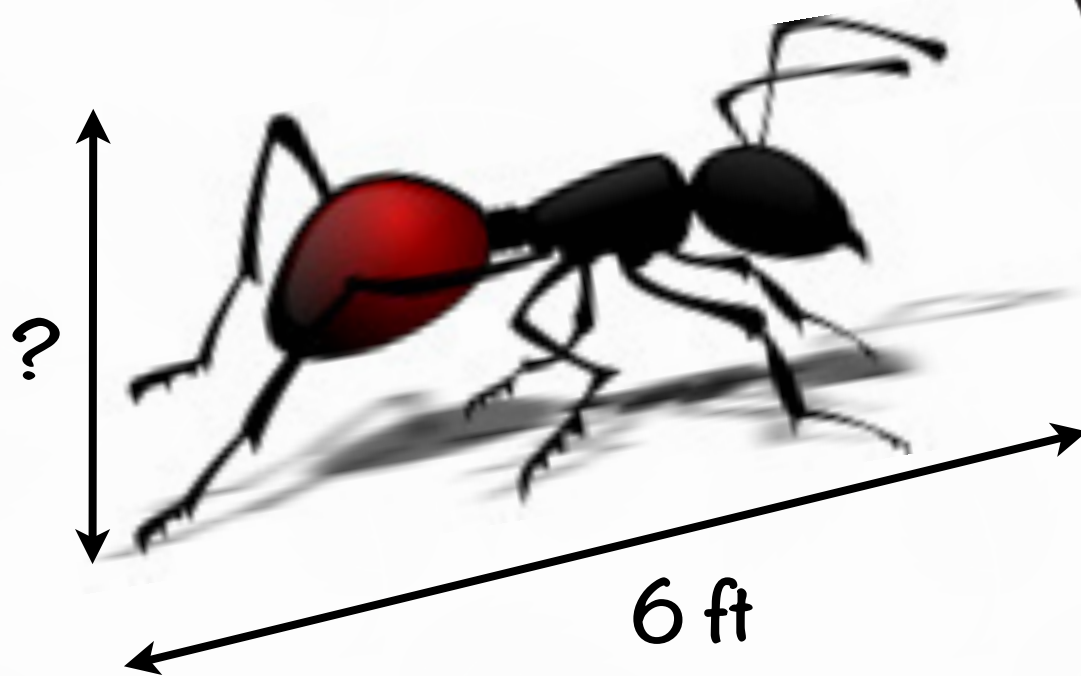
Are the figures similar?



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18.

Groundhog Stats
Height: 1 ft
Shadow Length: 1.5 ft

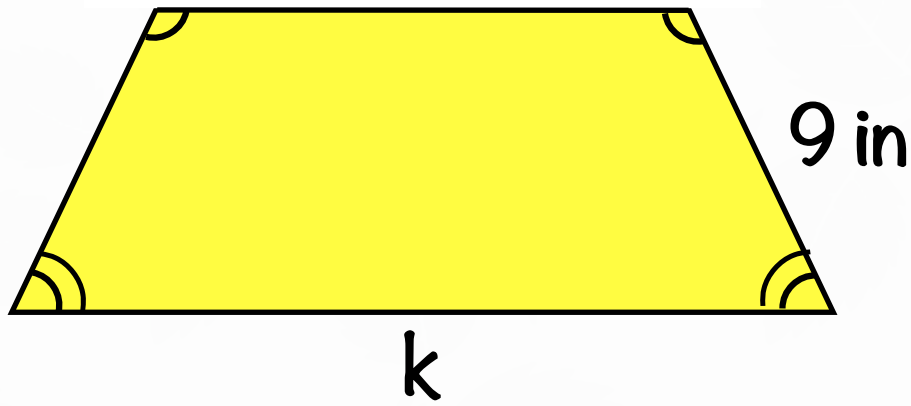
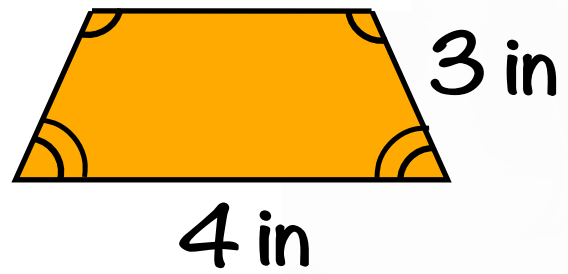


What is the height of the enormous ant?

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19.

$k = ?$



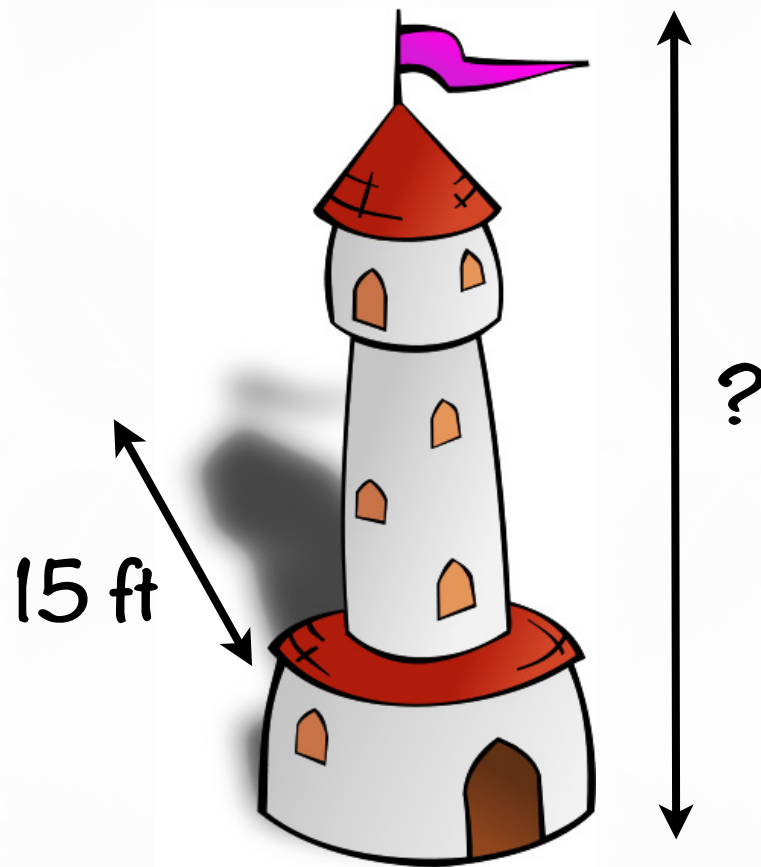
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20.

Groundhog Stats

Height: 2.5 ft

Shadow Length: 1 ft



What is the height of the tower?

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Choose an Activity!

1. Use a ruler, protractor, and a sheet of paper to create 3 rectangles that are all similar. Want a challenge? Make 3 triangles that are all similar. Label all sides and angles.
2. Use Activity Sheet 1 or 2 to create a poster or comic strip showing how to use shadows to find indirect measure.
3. Use Activity Sheet 3 to draw similar figures in the grid provided.
4. Use Activity Sheet 4 and create your own similar pictures. Use your imagination!
5. Use Activity Sheet 5 to create at least 3 of your own groundhog shadow indirect measure problems. Include illustrations and an answer key.

Name: _____

Date: _____

Indirect Measure and Similar Figures

1. _____

11. _____

2. _____

12. _____

3. _____

13. _____

4. _____

14. _____

5. _____

15. _____

6. _____

16. _____

7. _____

17. _____

8. _____

18. _____

9. _____

19. _____

10. _____

20. _____

Name: _____

Date: _____

Indirect Measure and Similar Figures KEY

1. 6 ft

11. $m = 12$ yd

2. $b = 4$ m

12. $c = 25$ in

3. yes

13. 48 ft

4. 15 ft

14. $x = 4.5$ km

5. $n = 45$ m

15. $p = 102$ degrees

6. no

16. 7.5 ft

7. 26 ft

17. yes

8. $w = 6$ in

18. 4 ft

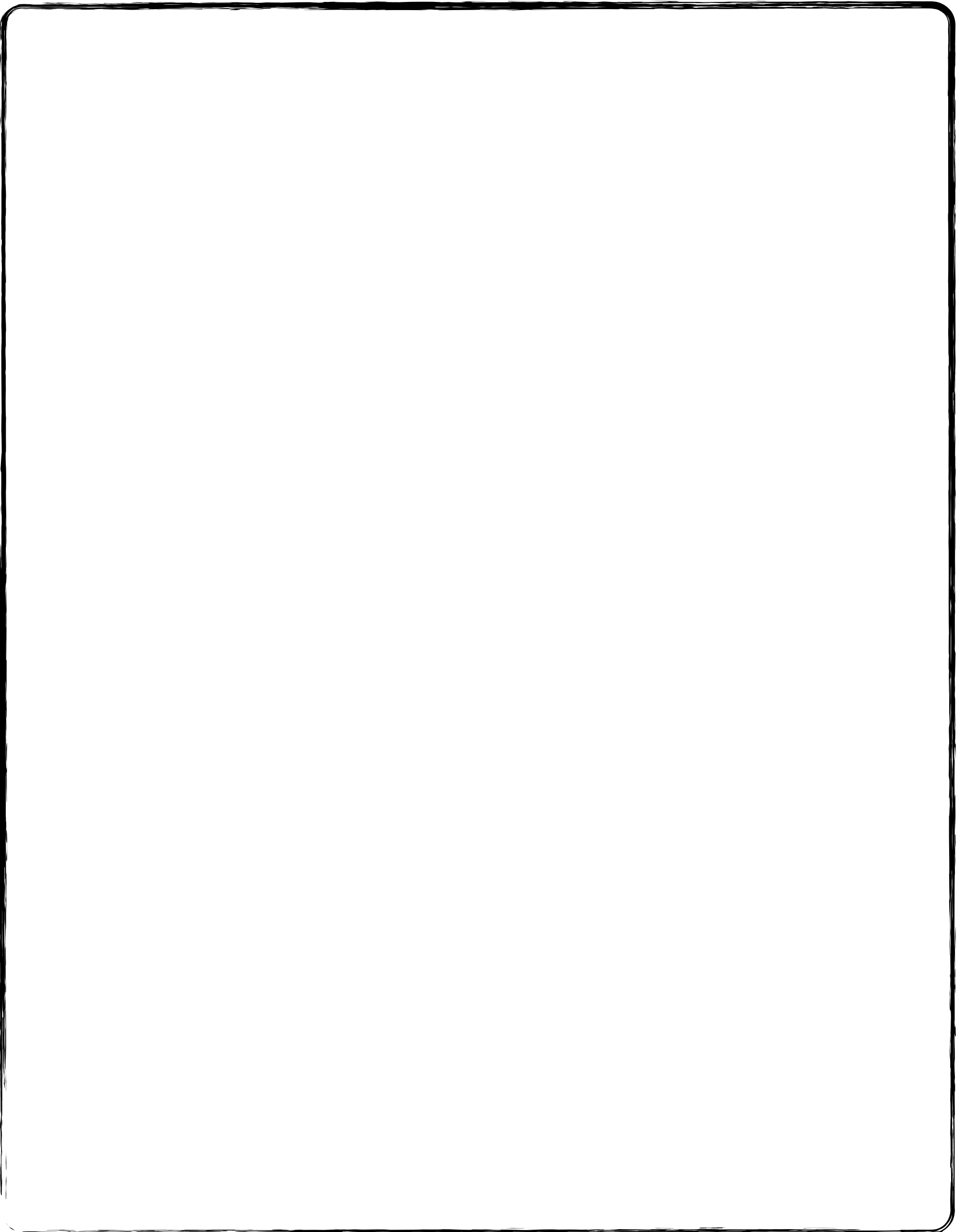
9. $a = 6$ in

19. $k = 12$ in

10. 5 ft

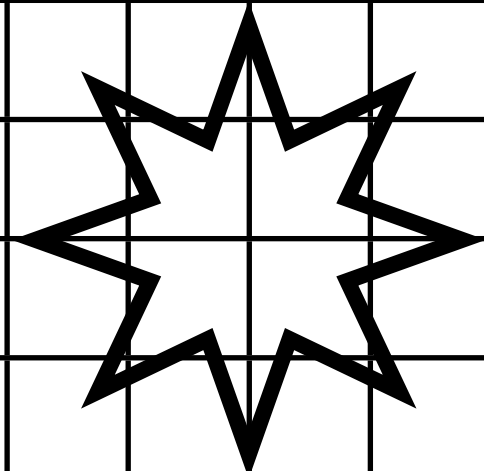
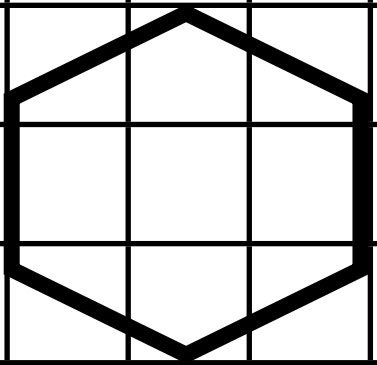
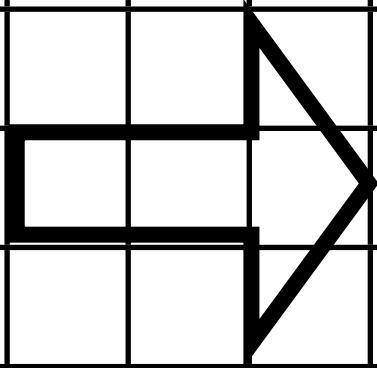
20. 37.5 ft

Indirect Measure Poster

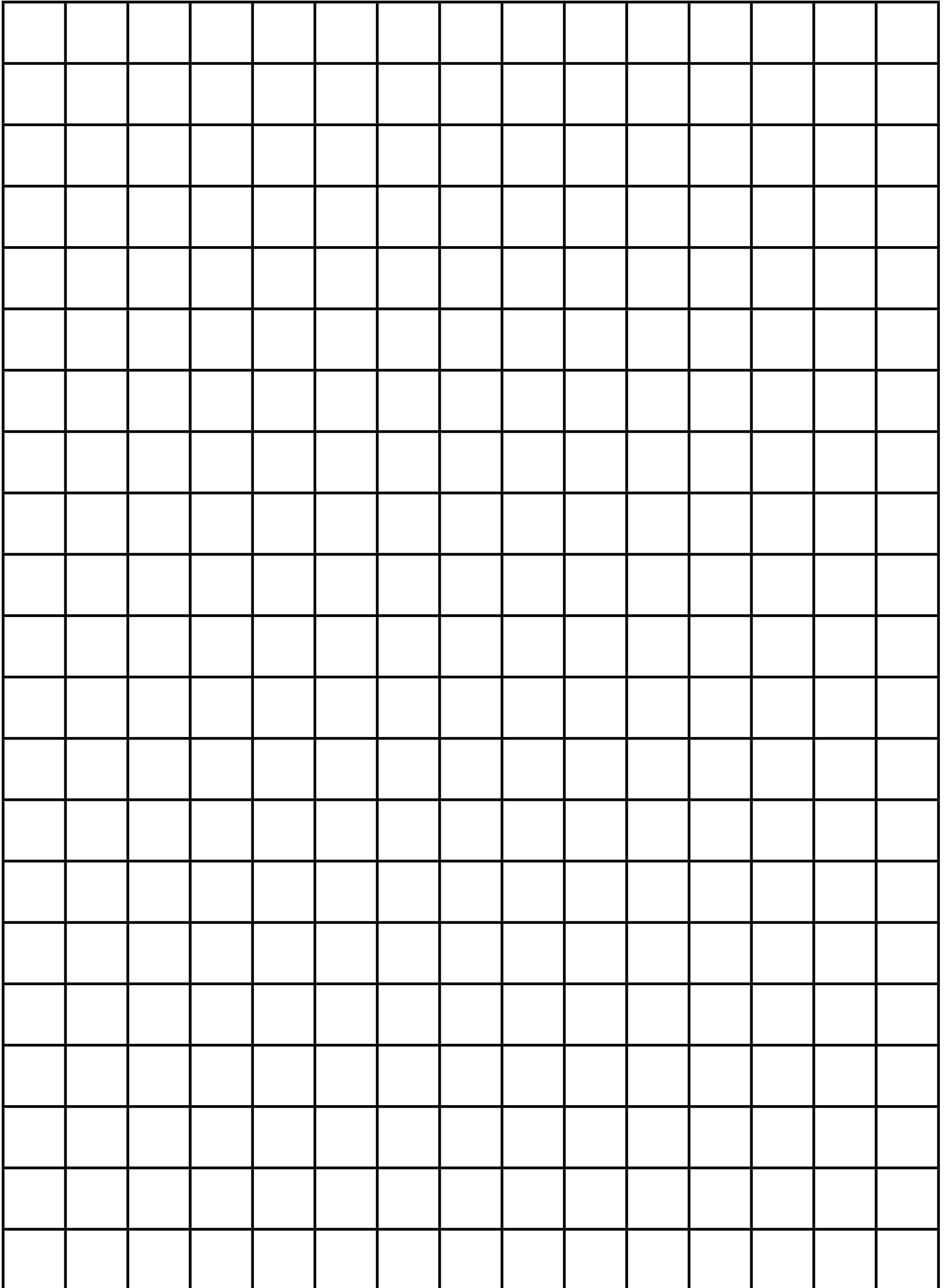


Indirect Measure Comic Strip

Draw a similar figure for each shape below.



Draw 2 similar pictures in the grid below.



Groundhog Stats

Height:

Shadow Length:



Groundhog Stats

Height:

Shadow Length:



Groundhog Stats

Height:

Shadow Length:

