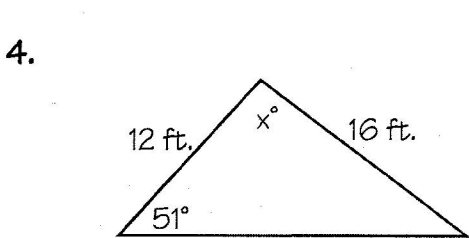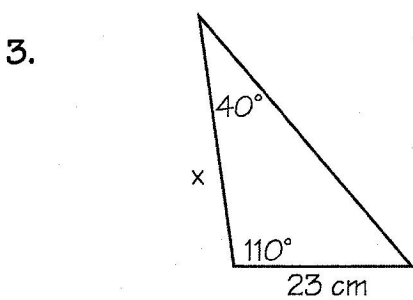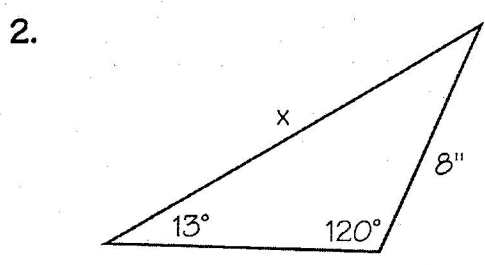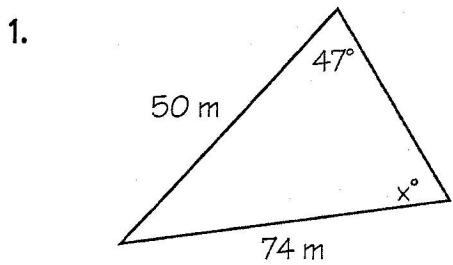# "Why do ghosts go to baseball games?"

Solve for the missing lengths and angles. Round your answers to the nearest tenth. The answer to each problem will match a letter that will allow you to figure out the joke.

1.

47°
50 m
x°
74 m

2.

x
8"
13°
120°

3.

40°
x
110°
23 cm

4.

x°
12 ft.
16 ft.
51°

5. $a = 18$, $c = 13$, $\angle A = 32°$, $\angle C = $ _____

6. $c = 22$, $\angle B = 48°$, $\angle C = 62°$, $b = $ _____

7. $a = 12$, $b = 10$, $\angle A = 43°$, $\angle B = $ _____

8. $a = 31$, $b = 38$, $\angle A = 30°$, $\angle B = $ _____

9. $b = 27$, $\angle A = 50°$, $\angle B = 75°$, $c = $ _____

10. $a = 5$, $b = 8$, $\angle B = 38°$, $\angle C = $ _____

O: 119.4

A: 71.3

H: 30.8

B: 34.6

S: 11.5

M: 29.6

N: 22.3/157.7

I: 17.9

T: 22.9

R: 93.3

E: 37.8/142.2

W: 65.5

P: 22.5

G: 15.4/164.6

U: 18.5

Y: 73.8

___ ___   ___ ___ ___   ___ ___ ___
9   10   7   10 10   9   2   8

___ ___ ___ ___ ___
6   1   5   3   4   8

"What do you call a person who jumps off a Paris bridge?"

Solve the following word problems. Round your answers to the nearest tenth. The answer to each problem will match a letter that will allow you to figure out the joke.

1. A baseball pennant is in the shape of an isosceles triangle. The base is 18" long. The sides meet at an angle of 32°. How long are the sides?
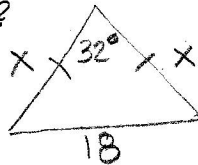

2. A guy wire to a telephone pole makes a 67° angle with the ground. At a point 20 ft. farther out from the guy wire, the angle of elevation of the top of the pole is 35°. How long is the guy wire?
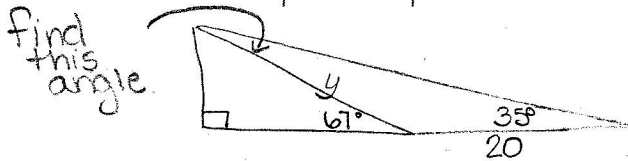
3. A fire is sighted from two ranger stations that are 4,000 m apart. The angles of observation to the fire measure 50° from one station and 43° from the other station. Find the distance along the line of sight to the fire from the closer of the two stations.
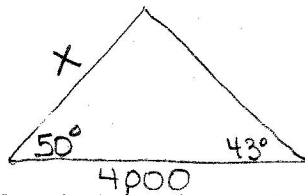
4. A loading ramp 6 m long makes a 24° angle with the level ground beneath it. The ramp is replaced by another ramp 16 m long. Find the angle that the new ramp makes with the ground.
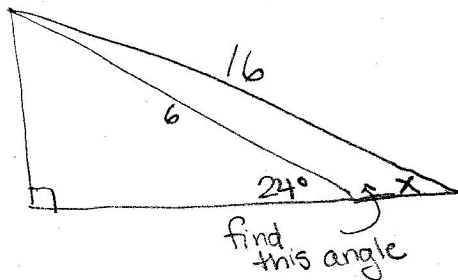
K: 340.2

E: 34.7

N: 32.7

L: 2,460.6

S: 8.8
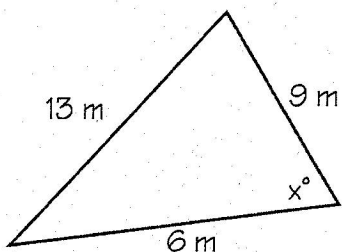
O: 43.9

P: 199.2

E: 21.6

Y: 75.6

I: 2,731.7

T: 4.9

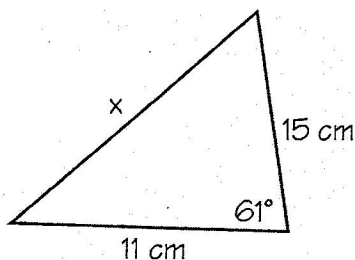W: 30.5

___ ___ ___ ___ ___
 4   3   2   1   2

"What do prisoners use to call each other?"

Solve for the missing lengths and angles. Round your answers to the nearest tenth. The answer to each problem will match a letter that will allow you to figure out the joke.
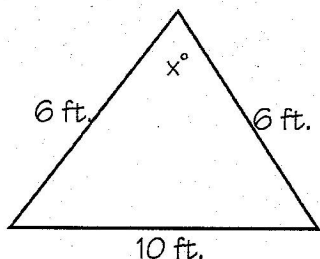
1.

13 m   9 m
x°
6 m

2.

x
15 cm
61°
11 cm

T: 24.7

P: 16.5

A: 18.3

N: 13.6

K: 110.5

H: 7.8

3.

x°
6 ft.   6 ft.
10 ft.

4.

x
8"
93°
21"

B: 44.7

C: 33.1

S: 22.9

U: 123.1

L: 43.9

E: 112.9

D: 64.5

O: 118.8

W: 42.6

5. a = 10, b = 12, c = 17, ∠B = _____

6. a = 5, c = 9, ∠B = 60°, b = _____

7. a = 20, b = 8, c = 14, ∠C = _____

8. b = 17, c = 6, ∠A = 75°, a = _____

| 7 | 3 | 5 | 5 | | 8 | 6 | 1 | 2 | 3 | 4 |

"What kind of street does a ghost like best?"

Solve the following word problems. Round your answers to the nearest tenth. The answer to each problem will match a letter that will allow you to figure out the joke.

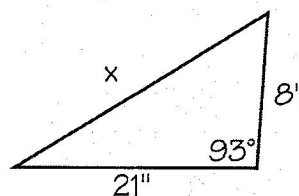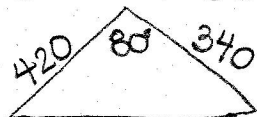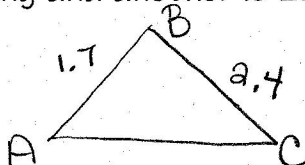1. Two airplanes leave the same airport at the same time. The first plane flies 170 km/h in a direction of 300°. The second plane flies 210 km/h in a direction of 220°. After two hours, how far apart are the planes? $300 - 220 = 80°$ $2(170) = 340$ $2(210) = 420$

2. A piece of wire 6.2 ft. long is bent into a triangular shape. One side is 1.7 ft. long and another is 2.4 ft. long. Find the angles of the triangle.

3. A pee wee baseball diamond is a square, each side being 60 ft. long. The pitcher's mound is 40 ft. from home plate. How far is the pitchers's mound to first base?
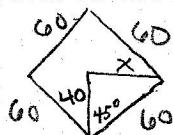
4. What is the perimeter of a equilateral triangle inscribed in a circle with a radius of 6".
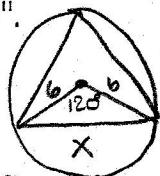
5. Plane A has been flying for an hour and a half at 400 mi/h heading 130° from the Indianapolis International Airport. Plane B has been flying for one hour at 350 mi/h heading 150° from the same airport. How far apart are the two planes? $150 - 130 = 20°$ $1.5(400) = 600$
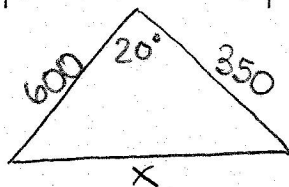
I: 435.6

M: 45.7

O: 34.1

D: 492.3

J: 305.4

E: 31.2

N: 42.5

S: 73.5
   42.6
   63.9

D: 296.4

Y: 56.8

A: 77.5
   43.8
   58.7

W: 291.1

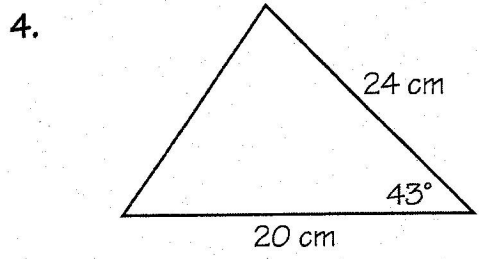___ ___ ___ ___ ___   ___ ___ ___
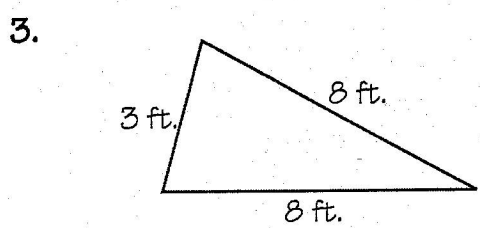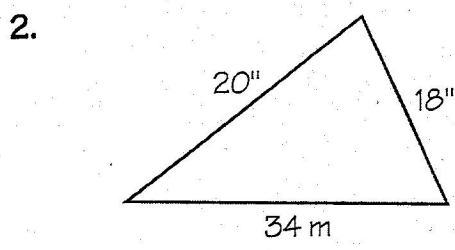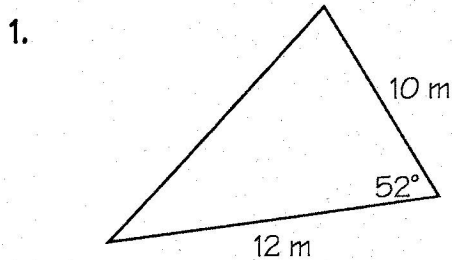 2   5   4   2   1   4   3   5

"What lies at the bottom of the ocean and twitches?"

Find the area of the triangles. Round your answers to the nearest tenth. The answer to each problem will match a letter that will allow you to figure out the joke.

1.

10 m
52°
12 m

2.

20"
18"
34 m

3.

3 ft.
8 ft.
8 ft.

4.

24 cm
43°
20 cm

5. $a = 14, b = 12, \angle C = 100°$

6. $a = 13, b = 24, c = 15$

7. $a = 5, b = 9, c = 10$

8. $b = 13, c = 20, \angle A = 52°$

9. $a = 23, c = 17, \angle B = 32°$

10. $a = 34, b = 8, c = 28$

11. $a = 3, b = 12, c = 10$

U: 82.7
I: 74.1
V: 47.3
T: 154.0
W: 81.3
A: 102.4
D: 24.9
S: 144.0
K: 86.2
Y: 19.5
N: 103.6
O: 11.8
J: 105.8
R: 163.7
E: 22.4
C: 12.2

__	__	__	__	__	__	__	__
8	9	7	4	1	3	5	2

__	__	__	__	__
10	4	7	11	6

Area of a Triangle – A = ½ab sin y and Heron's formula

Joke #26

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