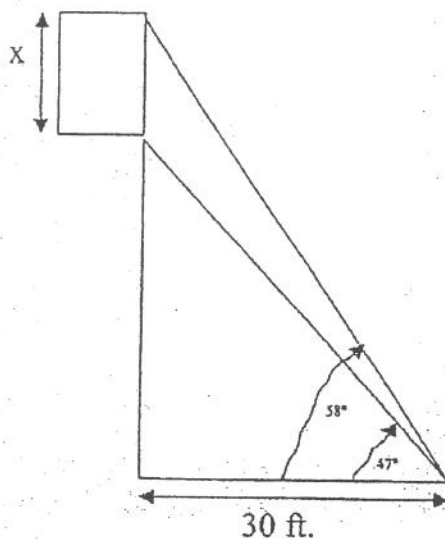# Pegasus Parade

Vu, a bystander at the Pegasus Parade, is lying on
his back and observing a large balloon of a cartoon
character, floating directly above Broadway Street.
Vu is located 30 feet from a point on the street
directly beneath the balloon. To see the top of the
balloon, he looks up at an angle of 58°. To see the
bottom of the balloon, he looks up at an angle of 47°.

30 ft.

a. To the nearest tenth, what is the distance, in feet,
   from the top of the balloon to the street?

b. To the nearest tenth, how tall, in feet, is the
   balloon?

Topic: Right Triangle Trig
ORQ Angles of Elevation & Depression/Trig.

After section 9.3 (PH)
After section 9.6 (ML)

Pegasus Parade Rubric

LOOK FORS:

A. 2 points: correct set up (1 point)
correct answer (1 point)

$$\tan 58° = \frac{x}{30}$$
$$x = 30 \tan 58 \approx 48.0$$

B. 2 points: 2 points: correct set up (1 point)
correct answer (1 point)

$$\tan 47° = \frac{x}{30}$$
$$x = 30 \tan 47 \approx 32.2$$

C. 1 point:

height: 48.0−32.2=15.8 feet

SCORING GUIDE:

Score	Description
4	Student scores 5 points
3	Student scores 4 points
2	Student scores 2 or 3 points
1	Student scores 1 point
0	Response is totally incorrect or irrelevant.
Blank	No response