

Angle Of Elevation

NAME _____

Fill in the blanks with measures of your choosing and answer the following questions.

1. Chris, standing on the horizontal ground _____ from the base of a cliff, noted that the angle of elevation to the top of the cliff was _____. How high was the cliff?

(a) If realistic limits are imposed on your choices, what are they?

(b) if the angle of elevation is held constant, how will your choice of distance affect the height of the cliff?

(c) If the distance to the cliff is held constant, how will your choice of angle affect the height of the cliff?

2. Jan, a surveyor, measured the angle between a path along a riverbank and a line to a fixed monument on the opposite bank to be _____. After walking along the path _____, Jan again measured and recorded this angle to be _____. At which point was Jan closer to the monument?

(a) Alter your choices so that Jan would be closer to the monument at the other point.

(b) Select measures that would create an isosceles triangle.

(c) Select measures that would create a right triangle with the right angle at the monument.

(d) Select measures that would create a right triangle with the right angle at one of the points on the path.

