Working with Right Triangles - Matching Worksheet

Match the word problems to their answers. Write the letter of the answer that matches the problem.

_____ 1. A hospital ramp for patients is inclined at 23°. The height of the ramp is 8 m. What is the distance patient will walk on the ramp?

    a.   12 inches

_____ 2. Mark making a BMX bicycle jump. He has a 2.3 meter metal post that he stands straight up. He places an 11 meter long piece of plywood at the very tip of the post. The other end of the plywood touches the ground. At what angle will riders jump off of the ramp?

    b.   26 m

_____ 3. A 25 inches long hockey stick is leaning on a wall, at the point X. Point y is a bottom of hockey stick, which makes a 29° angle. Point Z is at the corner of wall. Calculate the distance of point Z to Point X.

    c.   20 m

_____ 4. A 50-foot pole stands in the center of a ground. Point A is the top of pole, point B is the end of the pole's shadow and point C is the bottom of the pole. The distance of point A to point B is 75 feet. Calculate the distance from point B to point C?

    d.   69 feet

_____ 5. There is a walking ramp at the school. The incline of the ramp is 55°. The height of the ramp is 15 m. What is the distance Jack will walk on the ramp?

    e.   71°

_____ 6. One day Jack went to the garden. He was playing around the tree. He stays at the point A, where the shadow of the tree ends. The distance from that point, to the top of the tree point C is 95 feet. The height of the tree is 65 feet. What is the distance that Jack is standing from the tree?

    f.   56 feet