

1. An unwavering cat walks from a point 50 feet west and 18 feet north of a statue in a park. It heads directly toward a point 30 feet east and 24 feet south of the statue.

When the cat is due south of the statue, how far south of the statue is it?

2. The statue in the last example is surrounded by mud to a distance of 10 feet in all directions. For what distance does the cat walk through the mud?