Answer on Question #47600 – Physics – Other

my yard has a 2 in.drop over 16 ft. what is that degree?

Solution:
a = 2 inches = 0.167 ft − height, opposite side of the triangle;
b = 16 ft − side of the yard, adjasent side of the triangle;

We can find angle from right triangle using the definition of tangent:
$$\tan \alpha = \frac{\text{opposite side}}{\text{adjasent side}} = \frac{a}{b}$$
$$\alpha = \arctan\left(\frac{a}{b}\right) = \arctan\left(\frac{0.167 \text{ ft}}{16 \text{ ft}}\right) = 0.01°$$
Answer: angle is equal to 0.01°.