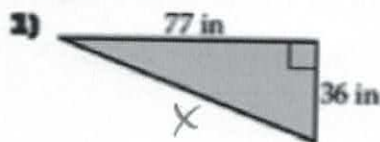


Key

Pythagorean Theorem

Name: _____ Hour: _____ Date: _____

SECTION 1: Calculate the missing side length of each right triangle.

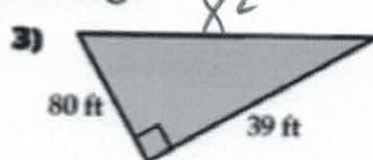


$$c = 85 \text{ in}$$

$$77^2 + 36^2 = X^2$$



$$b = 80 \text{ m}$$



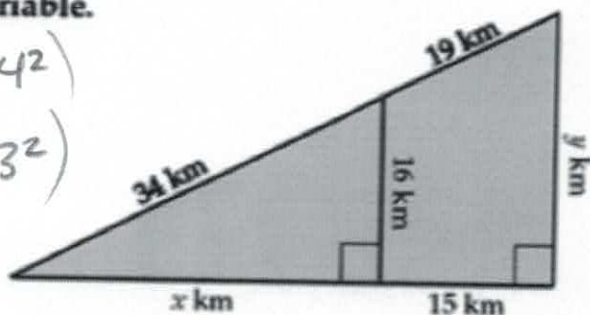
$$c = 89 \text{ in}$$

$$80^2 + 39^2 = X^2$$

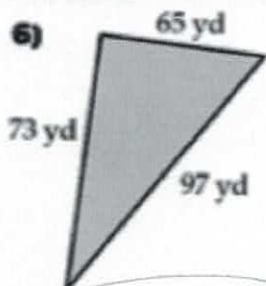
SECTION 2: Calculate the values of each variable.

4) $x = 30 \text{ km}$ ($X^2 + 16^2 = 34^2$)

5) $y = 28 \text{ km}$ ($Y^2 + 45^2 = 53^2$)

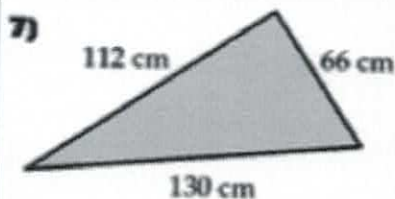


SECTION 3: Determine if each triangle is right, acute, or obtuse.



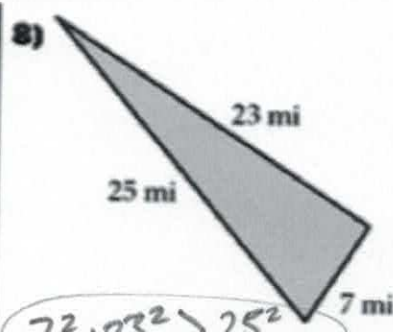
$$65^2 + 73^2 > 97^2$$

acute



$$112^2 + 66^2 = 130^2$$

right



$$7^2 + 23^2 > 25^2$$

obtuse