MAT 1033 Class Worksheet 15   Name _____

Must show all steps and all work to earn full credit.

Find the root if it is a real number.

1) $\sqrt[3]{-216}$

2) $\sqrt[4]{-625}$

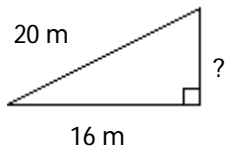3) $-\sqrt[6]{\dfrac{1}{64}}$

4) $\sqrt[4]{\dfrac{625}{81}}$

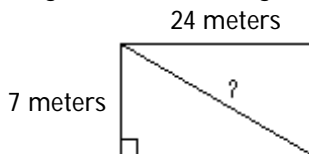Simplify the root.

5) $\sqrt[3]{x^{21}}$

6) $-\sqrt[4]{x^{20}}$

Find the unknown length in the right triangle. If necessary, approximate the length to the nearest thousandth.
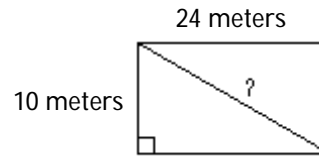
7)

20 m

16 m

?

Solve the problem. Give the answer to the nearest thousandth if necessary.

8) The length of a rectangle is 24 meters, and the width is 7 meters. Find the measure of the diagonal of the rectangle.

24 meters

7 meters

?

9) The length of a rectangle is 24 meters, and the width is 10 meters. Find the measure of the diagonal of the rectangle.

24 meters

10 meters

?

Solve.

10) Find the height of the cliff.

17m

?

8m

1