

Name _____
Mean Proportions (Regents Questions)

Date _____ Class _____
Mr. Lynch

1) In right triangle ABC, CD is the altitude drawn to hypotenuse AB. The length of AD is 21 inches less than the length of BD.

- a) If $BD = x$, write an expression for the length of AD in terms of x .
- b) If $CD = 10$ ", find the length of AD.

2) In right triangle ABC, CD is the altitude drawn to hypotenuse AB. The length of BD is 3 inches less than five times the length of AD.

- a) If $AD = x$, write an expression for the length of BD in terms of x .
- b) If $CD = 6$ inches, find the length of AD.

3) In right triangle ABC, CD is the altitude drawn to hypotenuse AB. The length of DB is five units longer than AD.

- a) If $AD = x$, write an expression for the length of DB, in terms of x .
- b) If $CD = 6$, find the length of DB.

4) In right triangle ABC, CD is the altitude drawn to hypotenuse AB. The length of AD is 30 units longer than DB.

- a) If $DB = x$, write an expression for the length of AD, in terms of x .
- b) If $CD = 8$, find the length of AD.