

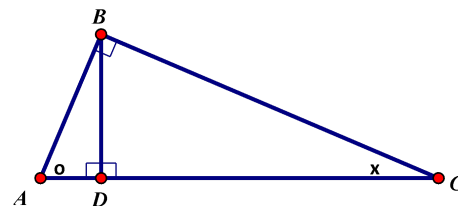
1. Which of these proportions represent a geometric mean?

- a) G.M. or Not G.M. b) G.M. or Not G.M. c) G.M. or Not G.M. d) G.M. or Not G.M.
- $$\frac{4}{6} = \frac{2}{3} \qquad \frac{2}{4} = \frac{4}{8} \qquad \frac{2}{2\sqrt{5}} = \frac{2\sqrt{5}}{10} \qquad \frac{1}{2} = \frac{5}{10}$$

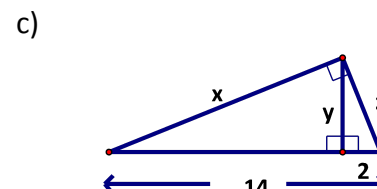
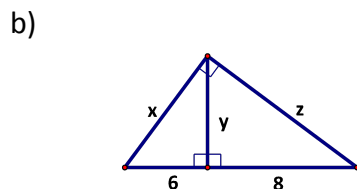
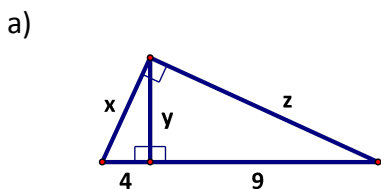
2. Determine the Geometric Mean of the two given numbers. (Exact Answers Only)

- a) 4 and 9 b) 5 and 20 c) 1 and 25 d) 4 and 16
- e) 8 and 9 f) 4 and 8 g) 2 and 75 h) 10 and 14

3. A geometry student says; "I got lost in that lesson - I wrote down that $AB^2 = AD \cdot AC$ but I have no idea where it comes from." Help this student - explain where $AB^2 = AD \cdot AC$ comes from.



4. Find the missing values. (If not a whole number, leave it in simplest radical form)



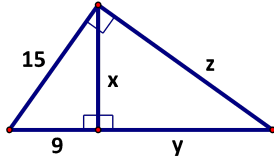
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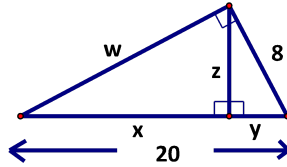
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5. Find the missing values. (If not a whole number, then round to two decimal places.)

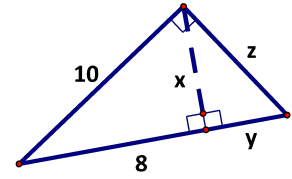
a)



b)



c)

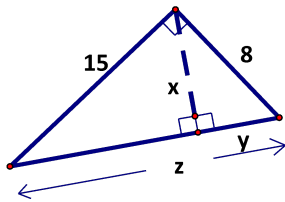


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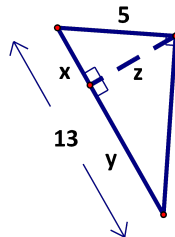
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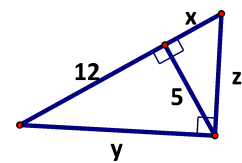
d)



e)



f)



$$x = \underline{\hspace{2cm}} \quad y = \underline{\hspace{2cm}}$$
$$z = \underline{\hspace{2cm}}$$

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$$z = \underline{\hspace{2cm}}$$