

KASA High School

Mathematics Placement Test

(Class 11)



Academic Year
2018-2019

Student's ID No.: _____

Date: _____

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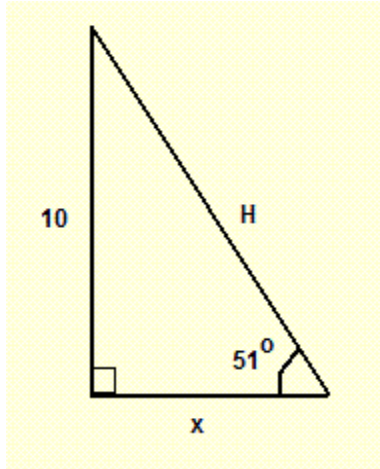
Teacher's Signature:
X

Grade: /20

Please provide answers and solutions to the following exercises.

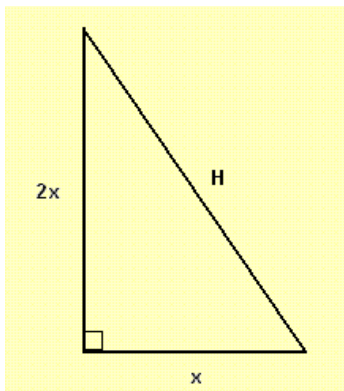
Trigonometry

A. Find x and H in the right triangle below. (2p)



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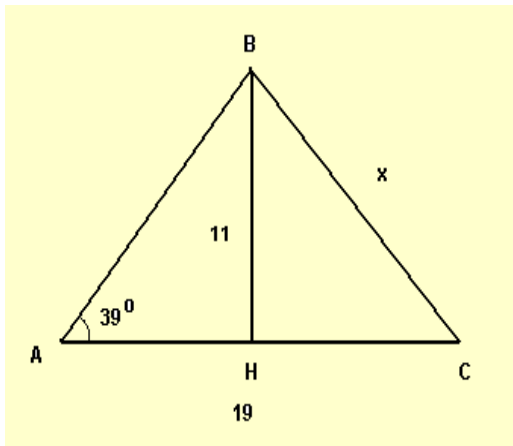
B. Find the lengths of all sides of the right triangle below if its area is 400. (2p)



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C. If we know that $BH=11\text{cm}$, $AC=19\text{cm}$, $\hat{A} = 39^\circ$ and BH is perpendicular to AC . Find x the length of BC . (2p)



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Math Word Problems

A. In a shop, the cost of 4 shirts, 4 pairs of trousers is \$400. The cost of 2 shirts and 4 pairs of trousers is \$320. What is the total cost of 1 shirt and 1 pair of trousers?(2p)

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B. John has \$23 in his wallet. He is earning \$28 for every day he goes to work. How much money he will have after two weeks of work? (John doesn't work on weekends).(2p)

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C. A real estate agent received a 6% commission on the selling price of a house. If his commission was \$8,880, what was the selling price of the house?(2p)

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Algebra

A. Solve the following equation.

$$x^2 - 3x - 10 = 0$$

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B. Simplify the expression $\frac{8x^3}{2x^3}$. (2p)

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Radical Expressions

$$-2\sqrt{3} + 4\sqrt{3} + 20$$

(2p)

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$$2\sqrt[3]{40x^3} - 5x\sqrt[3]{5} + \sqrt[3]{135x^3}$$

(2p)

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Good Luck!