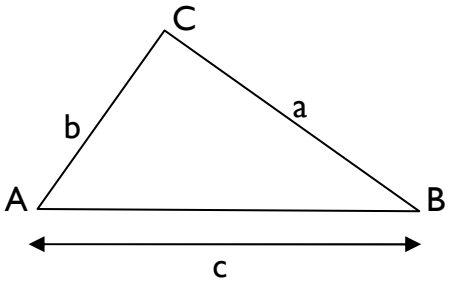
Name: _____ Date: _____ Row: _____ Period: _____

NOTES SECTION 8.2: THE PYTHAGOREAN THEROEM

THE PYTHAGOREAN THEREOM

THE PROOF



Given: $\triangle ABC$; $\angle ACB$ is a right angle

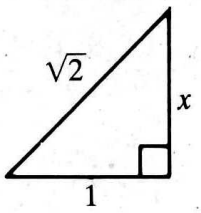
Prove: $c^2 = a^2 + b^2$

Proof:

STATEMENTS	REASONS
1)	1)
2)	2)
3)	3)
4)	4)
5)	5)
6)	6)
7)	7)
8)	8)

Find the value of x.

5.



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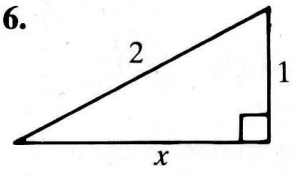

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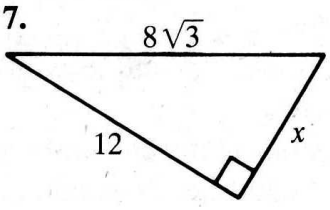

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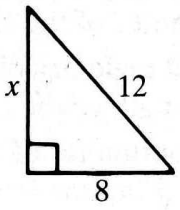
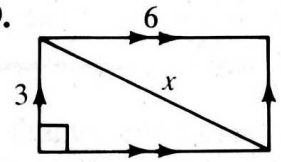


Find the value of x.

9.



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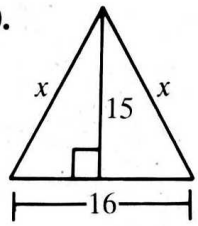

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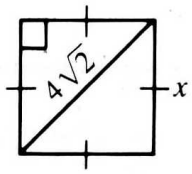

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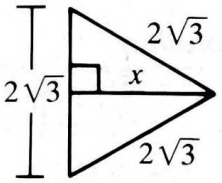

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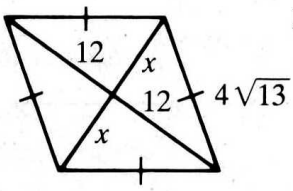

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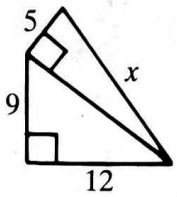

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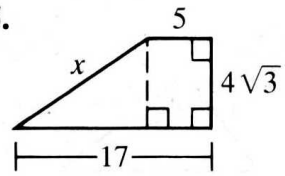

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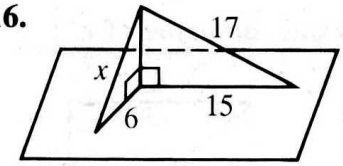
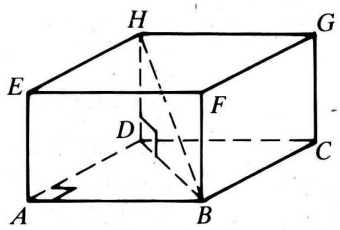


17) Find the length of the diagonals of a square with perimeter 56.	18) The diagonals of a rhombus have lengths 18 and 24. Find the perimeter.	19) A rectangle has diagonals of 5 cm and its width is $\sqrt{3}$ cm. Find the length.
20) The perimeter of a rhombus is 100 cm, and one diagonal is 48 cm long. Find the length of the other diagonal.	21) If $AB = 8$ and $AD = 6$, then $DB =$ _____. And if $HD = 5$, then $HB =$ _____. 	22) If $AB = 12$ and $AD = 8$, then $DB =$ _____. And if $HD = 9$, then $HB =$ _____.