

5:09 | Pythagoras' Theorem

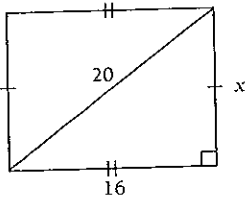
Name: _____

Class: _____

Examples

Find the value of the pronumerals.

1



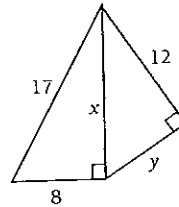
$$20^2 = x^2 + 16^2$$

$$400 = x^2 + 256$$

$$x^2 = 144$$

$$\therefore x = 12$$

2



$$17^2 = x^2 + 8^2$$

$$289 = x^2 + 64$$

$$x^2 = 225$$

$$\therefore x = 15$$

$$x^2 = y^2 + 12^2$$

$$225 = y^2 + 144$$

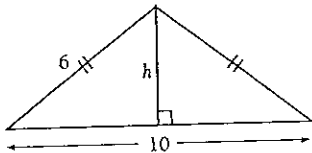
$$y^2 = 81$$

$$\therefore y = 9$$

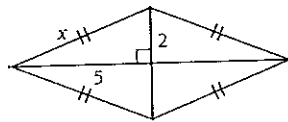
Exercise

1 Find the value of the pronumerals.

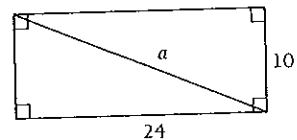
a



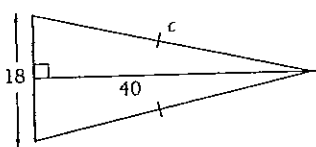
b



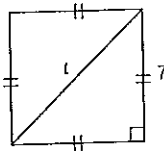
c



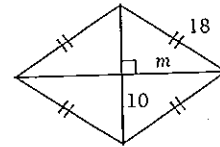
d



e

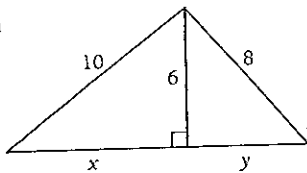


f

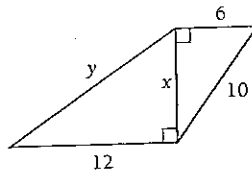


2 Find the value of the pronumerals.

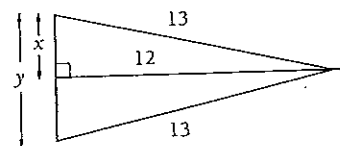
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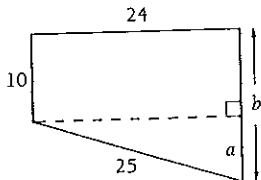
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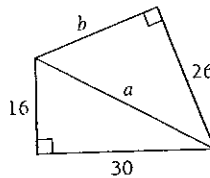
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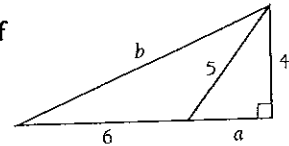
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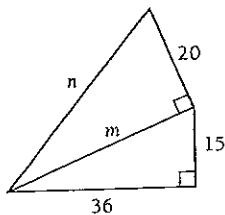
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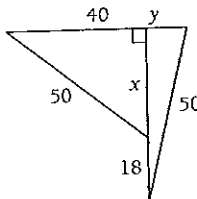
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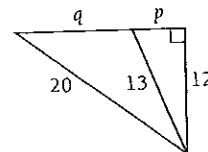
g



h



i



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- 1 a $\sqrt{11}$ b $\sqrt{29}$ c 26 d 41 e $\sqrt{98}$ f $\sqrt{224}$
- 2 a $x=8, y=\sqrt{28}$ b $x=8, y=\sqrt{208}$ c $x=5, y=10$ d $a=7, b=17$
- e $a=34, b=\sqrt{480}$ f $a=3, b=\sqrt{97}$ g $m=39, n=\sqrt{1921}$ h $x=30, y=14$
- i $p=5, q=11$