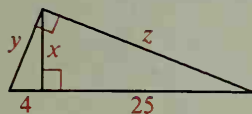
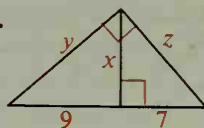


Find the values of x , y , and z .

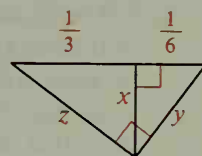
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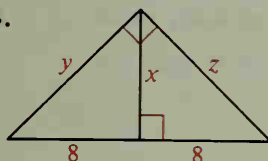
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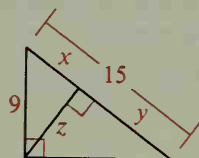
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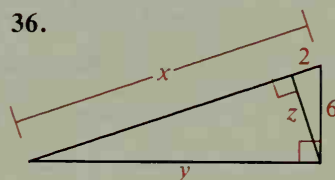
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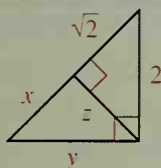
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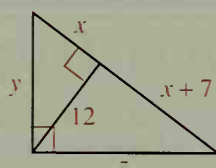
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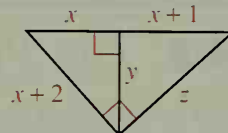
37.



38.



39.

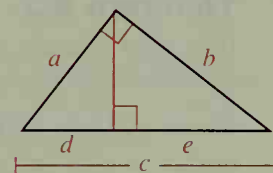


40. Prove Theorem 8-1.

41. a. Refer to the figure at the right, and use Corollary 2 to complete:

$$a^2 = \underline{\quad ? \quad} \text{ and } b^2 = \underline{\quad ? \quad}$$

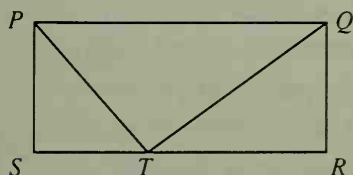
b. Add the equations in part (a), factor the sum on the right, and show that $a^2 + b^2 = c^2$.



C 42. Prove: In a right triangle, the product of the hypotenuse and the length of the altitude drawn to the hypotenuse equals the product of the two legs.

43. Given: $PQRS$ is a rectangle;
 PS is the geometric mean
 between ST and TR .

Prove: $\angle PTQ$ is a right angle.



44. Given: $PQRS$ is a rectangle;
 $\angle A$ is a right angle.
 Prove: $BS \cdot RC = PS \cdot QR = (PS)^2$

