

**CHAPTER 8: RIGHT TRIANGLES**

**SECTION 8.1: SIMILARITY IN RIGHT TRIANGLES**

**RADICAL REVIEW**

A radical is in simplest form when:

- 1)
- 2)
- 3)

**EXAMPLE 1**

Simplify.

a)	b)	c)	d)
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**YOUR TURN**

Simplify.

a)	b)	c)
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**EXAMPLE 2**

**YOUR TURN**

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**REMEMBER**

**DEFINITION**

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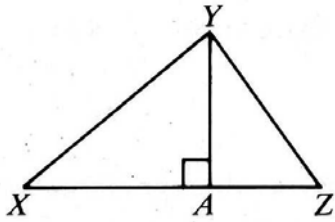
**EXAMPLE 3**

**YOUR TURN**

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## THEOREM

I-3:  $\angle XYZ$  is a right angle. Complete.



1)  $\overline{YA}$  is the \_\_\_\_\_ to the \_\_\_\_\_ of right  $\triangle XYZ$ .

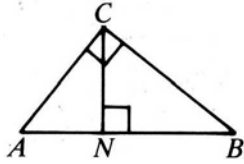
2)  $\triangle XYZ \sim \triangle$  \_\_\_\_\_  $\sim \triangle$  \_\_\_\_\_

3) If  $m(\angle YXZ) = 40$ , then  $m(\angle ZYA) =$  \_\_\_\_\_,  $m(\angle YZA) =$  \_\_\_\_\_, and  $m(\angle XYA) =$  \_\_\_\_\_.

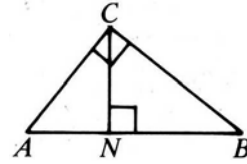
## COROLLARY

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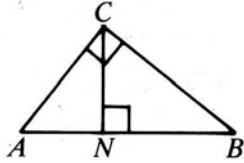
4) If  $CN = 8$  and  $NB = 16$ , find \_\_\_\_\_.



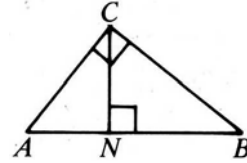
5) If  $AN = 4$  and  $CN = 12$ , find \_\_\_\_\_.



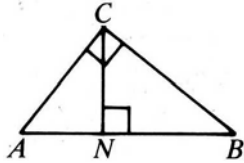
6) If  $AN = 8$  and  $NB = 12$ , find \_\_\_\_\_.



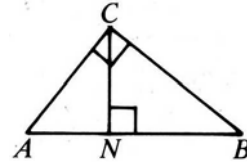
7) If  $AN = 4$  and  $CN = 8$ , find \_\_\_\_\_.



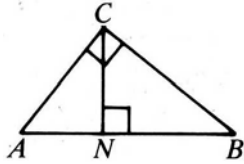
8) If  $AN = 5$  and  $AB = 12$ , find \_\_\_\_\_.



9) If  $AB = 18$  and  $CB = 12$ , find \_\_\_\_\_.



10) If  $CB = 20$  and  $NB = 16$ , find \_\_\_\_\_.



11) If  $AC = 6$  and  $AN = 4$ , find \_\_\_\_\_.

