

Name \_\_\_\_\_



Date \_\_\_\_\_

## Radicals

Given right triangle ABC with hypotenuse  $c$  and sides  $a$  and  $b$ , calculate the length of the missing side.

1. $a = 13$ $b = 6$ $c = ?$	2. $a = ?$ $b = 11$ $c = \sqrt{202}$	3. $a = ?$ $b = 14$ $c = \sqrt{221}$
4. $a = 8$ $b = 12$ $c = ?$	5. $a = 10$ $b = ?$ $c = \sqrt{149}$	6. $a = 4$ $b = ?$ $c = 4\sqrt{10}$
7. $a = 9$ $b = 6$ $c = ?$	8. $a = 5$ $b = 4$ $c = ?$	9. $a = 14$ $b = ?$ $c = \sqrt{317}$
10. $a = ?$ $b = 8$ $c = \sqrt{233}$	11. $a = ?$ $b = 10$ $c = \sqrt{181}$	12. $a = 14$ $b = ?$ $c = 2\sqrt{65}$
13. $a = 4$ $b = 12$ $c = ?$	14. $a = 5$ $b = 6$ $c = ?$	15. $a = ?$ $b = 13$ $c = \sqrt{218}$
16. $a = ?$ $b = 14$ $c = \sqrt{317}$	17. $a = 12$ $b = ?$ $c = 4\sqrt{10}$	18. $a = ?$ $b = 10$ $c = 2\sqrt{41}$

$$19. a = 5$$

$$b = 9$$

$$c = ?$$

$$20. a = 11$$

$$b = ?$$

$$c = \sqrt{290}$$

$$21. a = 7$$

$$b = 6$$

$$c = ?$$