

Name _____



Date _____

Radicals

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

1. $a = ?$ $b = \sqrt{41}$ $c = 2\sqrt{15}$	2. $a = \sqrt{11}$ $b = \sqrt{7}$ $c = ?$	3. $a = ?$ $b = \sqrt{57}$ $c = \sqrt{79}$
4. $a = 4\sqrt{2}$ $b = \sqrt{34}$ $c = ?$	5. $a = ?$ $b = \sqrt{6}$ $c = \sqrt{37}$	6. $a = \sqrt{21}$ $b = \sqrt{26}$ $c = ?$
7. $a = ?$ $b = \sqrt{41}$ $c = \sqrt{59}$	8. $a = \sqrt{53}$ $b = ?$ $c = \sqrt{101}$	9. $a = 2\sqrt{6}$ $b = ?$ $c = 8$
10. $a = \sqrt{19}$ $b = ?$ $c = 2\sqrt{6}$	11. $a = ?$ $b = \sqrt{37}$ $c = \sqrt{69}$	12. $a = ?$ $b = 4\sqrt{3}$ $c = \sqrt{105}$
13. $a = 4$ $b = \sqrt{41}$ $c = ?$	14. $a = \sqrt{6}$ $b = ?$ $c = 6$	15. $a = ?$ $b = 7$ $c = 2\sqrt{21}$
16. $a = \sqrt{33}$ $b = \sqrt{23}$	17. $a = \sqrt{58}$ $b = \sqrt{26}$	18. $a = ?$ $b = \sqrt{26}$ _____

$$c = ?$$

$$\begin{aligned}19. \quad a &= ? \\ b &= 2\sqrt{14} \\ c &= 2\sqrt{26}\end{aligned}$$

$$c = ?$$

$$\begin{aligned}20. \quad a &= \sqrt{42} \\ b &= ? \\ c &= \sqrt{102}\end{aligned}$$

$$c = \sqrt{57}$$

$$\begin{aligned}21. \quad a &= 2\sqrt{7} \\ b &= ? \\ c &= \sqrt{73}\end{aligned}$$