

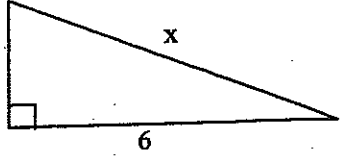
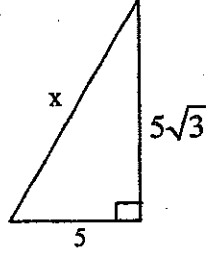
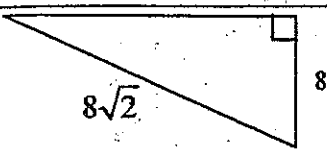
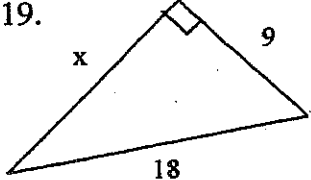
**Simplifying Radical Expressions
And Pythagorean Theorem**

Name _____
Date _____ Pd. _____

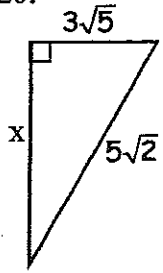
Simplify each radical expression. See page 390 for examples.

1. $\sqrt{72}$	2. $\sqrt{\frac{8}{28}}$	3. $\sqrt{56}$
4. $2\sqrt{18}$	5. $\frac{\sqrt{144}}{\sqrt{2}}$	6. $6\sqrt{27}$
7. $\sqrt{3}\cdot\sqrt{12}$	8. $\frac{45}{\sqrt{3}}$	9. $\sqrt{\frac{25}{20}}$
10. $\sqrt{12}\cdot\sqrt{5}$	11. $\sqrt{8}\cdot\sqrt{98}$	12. $(\sqrt{5})^2$
13. $(\sqrt{27})^2$	14. $(2\sqrt{5})^2$	15. $(\sqrt{12}\sqrt{6})^2$

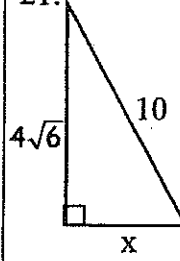
Use the Pythagorean Theorem to find x.

16. 	17. 
18. 	19. 

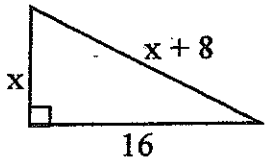
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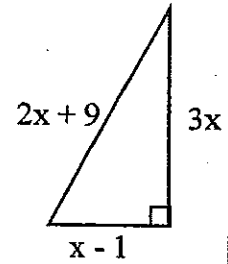
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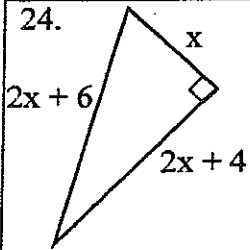
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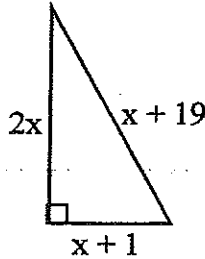
23.



24.



25.



Answer yes if the given measures of the sides of a right triangle. If the triple is a Pythagorean triple and belongs to one of these families, also give that letter.

A. 3, 4, 5

B. 5, 12, 13

C. 8, 15, 17

D. 7, 24, 25

E. 9, 40, 41

_____ 26. 15, 36, 39

_____ 30. 18, 30, 24

_____ 27. 40, 75, 85

_____ 31. 24, 10, 26

_____ 28. 18, 60, 82

_____ 32. 2.5, 6, 6.5

_____ 29. 36, 164, 160

_____ 33. 4.5, 6, 7.5