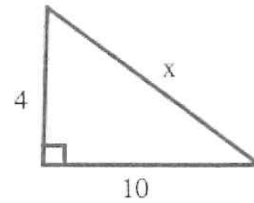


1. What integers do the radicals lie between:

a) $\sqrt{200}$

b. $\sqrt{19}$

2. Solve for x. Leave answer as simplified radical.



#3-18, Simplify each of the following

3. $5\sqrt{54}$

4. $\frac{4}{\sqrt{7}}$

5. $\frac{\sqrt{72}}{3}$

6. $(3\sqrt{7})(5\sqrt{21})$

7. $(3 + 2\sqrt{2})(5 - 4\sqrt{2})$

8. $\frac{1}{3}\sqrt{432}$

9. $3\sqrt{28} - 2\sqrt{63}$

10. $(5\sqrt{2})^2$

11. $\sqrt{6}(2 - \sqrt{5})$

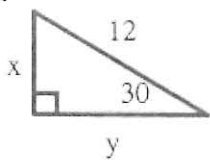
12. $(3\sqrt{7} + 2)^2$

13. $-2\sqrt{243}$

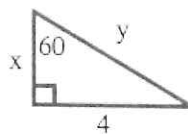
14. $15\sqrt{\frac{1}{9}}$

#15-19, Find the missing sides of the triangles. You can use 30-60-90 and 45-45-90 shortcuts.

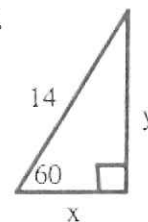
15.



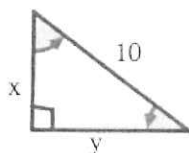
16.



17.



18.



19.

