

Name _____

8-6A Lesson Master**Questions on SPUR Objectives**

See Student Edition pages 574–577 for objectives.

SKILLS Objective D

In 1–8, rationalize the denominator and simplify. Do your work by hand; check with a CAS.

1. $\frac{1}{\sqrt{3}}$ _____

2. $\frac{5}{\sqrt{3}}$ _____

3. $\frac{60}{\sqrt{3}}$ _____

4. $\frac{n}{\sqrt{3}}$ _____

5. $\frac{1}{\sqrt{17}}$ _____

6. $\frac{3}{\sqrt{12}}$ _____

7. $\frac{1}{\sqrt{p}}$ _____

8. $\frac{a}{\sqrt{x}}$ _____

In 9 and 10, multiply and simplify. Do your work by hand; check with a CAS.

9. $(3 + \sqrt{5})(3 - \sqrt{5})$ _____

10. $(a + \sqrt{b})(a - \sqrt{b})$ _____

In 11–14, rationalize the denominator. Do your work by hand; check with a CAS.

11. $\frac{10}{1 + \sqrt{3}}$ _____

12. $\frac{15}{5 + \sqrt{5}}$ _____

13. $\frac{1}{a + \sqrt{b}}$ _____

14. $\frac{14}{\sqrt{2} - \sqrt{3}}$ _____

15. The diagonal of a square is 12 cm. Find the length of a side of the square. _____