Name

8-6B Lesson Master

Questions on SPUR Objectives
See pages 521–523 for objectives.

SKILLS Objectives D and E

1. The area of a square is 64 square units. What is the length of a side? _____

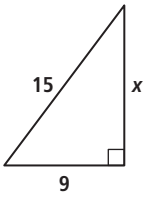
In 2–10, write the exact value or approximate the number to the nearest hundredth.

2. $\sqrt{169}$ _____
3. $-\sqrt{441}$ _____
4. $\sqrt{225}$ _____
5. $\sqrt{85}$ _____
6. $-\sqrt{110}$ _____
7. $81^{\frac{1}{2}}$ _____
8. $34^{\frac{1}{2}}$ _____
9. $-(196)^{\frac{1}{2}}$ _____
10. $-(13)^{\frac{1}{2}}$ _____

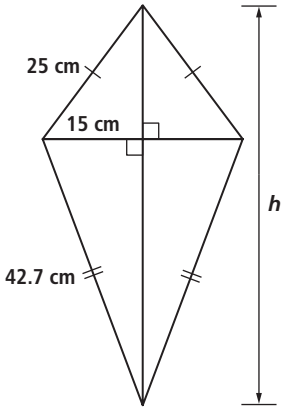
In 11–18, evaluate the expression. Write the exact value or approximate to the nearest hundredth.

11. $\sqrt{1{,}048 - 24}$ _____
12. $\sqrt{9 + 64}$ _____
13. $(16 + 81)^{\frac{1}{2}}$ _____
14. $(25 + 144)^{\frac{1}{2}}$ _____
15. $3\sqrt{13} \cdot \sqrt{13}$ _____
16. $-2\sqrt{6} \cdot \sqrt{6}$ _____
17. $4\left(\frac{7}{10}\right)^{\frac{1}{2}} \cdot \left(\frac{7}{10}\right)^{\frac{1}{2}}$ _____
18. $\frac{2}{3} \cdot \left(\frac{15}{8}\right)^{\frac{1}{2}} \cdot \left(\frac{15}{8}\right)^{\frac{1}{2}}$ _____

19. Find the length of the missing side of the right triangle.



20. Veronica needs a new pole for her kite. What is the height, *h*, of the kite? Round to the nearest whole number.



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21. If $f(y) = 3\sqrt{y}\,\sqrt{y}$, what is $f(8)$? _____

22. Which of the expressions below are equal to $(48)^{1/2}$? _____

A $4\sqrt{3}$ B $2\sqrt{24}$ C $2\sqrt{12}$ D $\sqrt{6}\cdot\sqrt{8}$

In 23–32, write the exact value or approximate the number to the nearest hundredth.

23. $\sqrt[3]{9.261}$ _____

24. $\sqrt[3]{125}$ _____

25. $\sqrt[3]{-27}$ _____

26. $-\sqrt[3]{343}$ _____

27. $\sqrt[3]{512}$ _____

28. $\sqrt[3]{\frac{1}{4}}\cdot\sqrt[3]{\frac{1}{4}}\cdot\sqrt[3]{\frac{1}{4}}$ _____

29. $\sqrt[3]{1.2}\cdot\sqrt[3]{1.2}\cdot\sqrt[3]{1.2}$ _____

30. $\sqrt[3]{5}\cdot\sqrt[3]{5}\cdot\sqrt[3]{5}$ _____

31. $\sqrt[3]{64}\cdot\sqrt[3]{-8}$ _____

32. $\sqrt[3]{27}\cdot\sqrt[3]{-216}\cdot\sqrt[3]{-1}$ _____