

LESSON

Practice A**1-3** *Square Roots*

Identify perfect squares that are closest in value to these numbers.

1. 47

2. 119

perfect square < 47 _____perfect square < 119 _____perfect square > 47 _____perfect square > 119 _____

Estimate to the nearest whole number.

3. $\sqrt{55}$

4. $\sqrt{92}$

5. $\sqrt{135}$

Estimate to the nearest tenth.

6. $\sqrt{42}$

7. $\sqrt{76}$

8. $\sqrt{90}$

Simplify each expression. Use perfect square factors to help you.

9. $\sqrt{48}$

10. $\sqrt{75}$

11. $-\sqrt{576}$

12. $\sqrt{45}$

13. $\sqrt{72}$

14. $\sqrt{200}$

Simplify each expression.

15. $\sqrt{3} \cdot \sqrt{12}$

16. $\frac{\sqrt{128}}{\sqrt{2}}$

17. $\frac{-4\sqrt{8}}{3}$

Add or subtract.

18. $3\sqrt{5} + 4\sqrt{5}$

19. $2\sqrt{9} - 2\sqrt{2}$

20. $-3\sqrt{15n} + 7\sqrt{15n}$

**Practice B**
Square Roots

Complete the Circled Questions

Estimate to the nearest tenth.

1. $\sqrt{78}$

2. $-\sqrt{57}$

3. $\sqrt{39}$

Simplify each expression.

4. $\sqrt{243}$

5. $\frac{\sqrt{90}}{\sqrt{40}}$

6. $\sqrt{42} \cdot \sqrt{3}$

7. $-\frac{4}{\sqrt{144}}$

8. $\sqrt{\frac{125}{5}}$

9. $-\sqrt{320}$

Simplify by rationalizing each denominator.

10. $\frac{6}{\sqrt{5}}$

11. $\frac{-3\sqrt{15}}{\sqrt{3}}$

12. $\frac{\sqrt{13}}{4\sqrt{6}}$

Add or subtract.

13. $7\sqrt{5} - 10\sqrt{5}$

14. $12\sqrt{3} + 3\sqrt{12}$

15. $-6\sqrt{50} + 4\sqrt{32}$

Solve.

16. A building has a mural painted on an outside wall. The mural is a square with an area of
- $14,400 \text{ ft}^2$
- . What is the width of the mural?
