

Lesson 9 Skills Practice

Estimate Roots

Estimate to the nearest integer.

1. $\sqrt{5}$

2. $\sqrt{18}$

3. $\sqrt{10}$

4. $\sqrt{34}$

5. $\sqrt{53}$

6. $\sqrt{80}$

7. $\sqrt[3]{510}$

8. $\sqrt[3]{999}$

9. $\sqrt[3]{119}$

10. $\sqrt{77}$

11. $\sqrt{171}$

12. $\sqrt{230}$

13. $\sqrt{147}$

14. $\sqrt{194}$

15. $\sqrt{290\frac{3}{7}}$

16. $\sqrt{440}$

17. $\sqrt{578}$

18. $\sqrt{730}$

19. $\sqrt[3]{780}$

20. $\sqrt[3]{1,370}$

21. $\sqrt[3]{947}$

22. $\sqrt{17.8}$

23. $\sqrt{11.5}$

24. $\sqrt{37.7}$

25. $\sqrt{23.8}$

26. $\sqrt{59.4}$

27. $\sqrt{97.3}$

28. $\sqrt[3]{32.5}$

29. $\sqrt[3]{211.7}$

30. $\sqrt{692.9}$

Lesson 9 Homework Practice

Estimate Roots

Estimate to the nearest integer.

1. $\sqrt{38}$

2. $\sqrt{53}$

3. $\sqrt{99}$

4. $\sqrt{227}$

5. $\sqrt[3]{26}$

6. $\sqrt[3]{214}$

7. $\sqrt[3]{80}$

8. $\sqrt[3]{510}$

9. $\sqrt{86.4}$

10. $\sqrt{45.2}$

11. $\sqrt{7\frac{2}{5}}$

12. $\sqrt{27\frac{3}{8}}$

Order from least to greatest.

13. 8, 10, $\sqrt{61}$, $\sqrt{71}$

14. $\sqrt{45}$, 9, 6, $\sqrt{63}$

15. $\sqrt{50}$, 7, $\sqrt{44}$, 5

ALGEBRA Estimate the solution of each equation to the nearest integer.

16. $d^2 = 61$

17. $z^2 = 85$

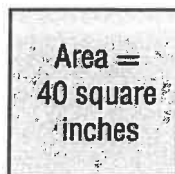
18. $r^2 = 3.7$

19. **GEOMETRY** The radius of a cylinder with volume V and height 10 centimeters is approximately $\sqrt{\frac{V}{30}}$. If a can that is 10 centimeters tall has a volume of 900 cubic centimeters, estimate its radius.

20. **TRAVEL** The formula $s = \sqrt{18d}$ can be used to find the speed s of a car in miles per hour when the car needs d feet to come to a complete stop after slamming on the brakes. If it took a car 12 feet to come to a complete stop after slamming on the brakes, estimate the speed of the car.

GEOMETRY The formula for the area of a square is $A = s^2$, where s is the length of a side. Estimate the length of a side for each square.

21.



22.

