**Reteach: 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.**



