Estimating Irrational Numbers to the nearest tenth

Name: Key

Estimate each problem to the nearest tenth.

1.) $\sqrt{28}$ **#1 answer:** 5.3

2.) $\sqrt{96}$ **#2 answer:** 9.8

3.) $\sqrt{78}$ **#3 answer:** 8.8

4.) $\sqrt{111}$ **#4 answer:** 10.5

5.) $\sqrt{63}$ **#5 answer:** 7.9

6.) $\sqrt{39}$ **#6 answer:** 6.2

7.) $\sqrt{14}$ **#7 answer:** 3.7

8.) $\sqrt{92}$ **#8 answer:** 9.6

9.) $\sqrt{85}$ **#9 answer:** 9.2

10.) $\sqrt{46}$ **#10 answer:** 6.8

1.) $\sqrt{25} = 5$

$\sqrt{28} = 5.3$

$\sqrt{36} = 6$

$5.2 \times 5.2 = 27.04$

$5.3 \times 5.3 = 28.09$

2.) $\sqrt{81} = 9$

$\sqrt{96} = 9.8$

$\sqrt{100} = 10$

$9.8 \times 9.8 = 96.04$

$9.7 \times 9.7 = 94.09$

3.) $\sqrt{64} = 8$

$\sqrt{78} = 8.8$

$\sqrt{81} = 9$

$8.7 \times 8.7 = 75.69$

$8.8 \times 8.8 = 77.44$

$8.9 \times 8.9 = 79.21$

4.) $\sqrt{100} = 10$

$\sqrt{111} = 10.5$

$\sqrt{121} = 11$

$10.4 \times 10.4 = 108.16$

$10.5 \times 10.5 = 110.25$

5.) $\sqrt{49} = 7$

$\sqrt{63} = 7.9$

$\sqrt{64} = 8$

$7.9 \times 7.9 = 62.41$

6.) $\sqrt{36} = 6$

$\sqrt{39} = 6.\underline{2}$

$\sqrt{49} = 7$

$6.1 \times 6.1 = 37.21$

$6.2 \times 6.2 = 38.44$

$6.3 \times 6.3 = 39.69$

7.) $\sqrt{9} = 3$

$\sqrt{14} = 3.\underline{7}$

$\sqrt{16} = 4$

$3.8 \times 3.8 = 14.44$

$3.7 \times 3.7 = 13.69$

8.) $\sqrt{81} = 9$

$\sqrt{92} = 9.\underline{6}$

$\sqrt{100} = 10$

$9.5 \times 9.5 = 90.25$

$9.6 \times 9.6 = 92.16$

9.) $\sqrt{81} = 9$

$\sqrt{85} = 9.\underline{2}$

$\sqrt{100} = 10$

$9.1 \times 9.1 = 82.81$

$9.2 \times 9.2 = 84.64$

$9.3 \times 9.3 = 86.49$

10.) $\sqrt{36} = 6$

$\sqrt{46} = 6.\underline{8}$

$\sqrt{49} = 7$

$6.7 \times 6.7 = 44.89$

$6.8 \times 6.8 = 46.24$