**Estimating Square Roots Homework**

**1.** Without using your calculator, approximate the value of each of the following square roots by identifying the perfect squares the radicand falls between.

 is between $\sqrt{}$ and $\sqrt{}$ .Therefore, it is between the integers \_\_\_\_\_ and \_\_\_\_\_.

  is between $\sqrt{}$ and $\sqrt{}$ .Therefore, it is between the integers \_\_\_\_\_ and \_\_\_\_\_.

  is between $\sqrt{}$ and $\sqrt{}$ .Therefore, it is between the integers \_\_\_\_\_ and \_\_\_\_\_.

 is between $\sqrt{}$ and $\sqrt{}$ .Therefore, it is between the integers \_\_\_\_ and \_\_\_\_\_.

–is between $\sqrt{}$ and $\sqrt{}$ .Therefore, it is between the integers \_\_\_\_ and \_\_\_\_\_.

 –is between $\sqrt{}$ and $\sqrt{}$ .Therefore, it is between the integers \_\_\_\_ and \_\_\_\_\_.

**2.** Write instructions on how to estimate the square root of a number that is not a perfect square.

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**3.** Tricia estimates that  is about eight. Do you agree or disagree? Explain.

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**4.** Is more or less than 6? Explain. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**5.** Is 9.5 a good first guess for $\sqrt{75}$ ? Why or why not?

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