

ESTIMATING SQUARE ROOT

- $\sqrt{90}$ is between ____ and ____
- $\sqrt{150}$ is between ____ and ____
- $\sqrt{111}$ is between ____ and ____
- $\sqrt{31}$ is between ____ and ____
- $\sqrt{80}$ is between ____ and ____
- $\sqrt{70}$ is between ____ and ____
- $\sqrt{115}$ is between ____ and ____
- $\sqrt{61}$ is between ____ and ____
- $\sqrt{172}$ is between ____ and ____
- $\sqrt{5}$ is between ____ and ____
- $\sqrt{7}$ is between ____ and ____
- $\sqrt{500}$ is between ____ and ____

13. Estimate the following square roots to the nearest whole number.

- | | | |
|----------------|------------------|------------------|
| a. $\sqrt{15}$ | b. $\sqrt{23}$ | c. $\sqrt{23.4}$ |
| d. $\sqrt{5}$ | e. $\sqrt{38.4}$ | f. $\sqrt{50}$ |

14. Estimate the following solutions to the nearest integer.

- | | | |
|----------------|----------------|----------------|
| a. $a^2 = 100$ | b. $b^2 = -33$ | c. $e^2 = 3.2$ |
| d. $g^2 = 55$ | e. $x^2 = 67$ | f. $y^2 = 110$ |

15. Estimate the values of the following square roots to the nearest tenth

- | | | |
|----------------|-----------------|-----------------|
| a. $\sqrt{7}$ | b. $\sqrt{136}$ | c. $\sqrt{65}$ |
| d. $\sqrt{74}$ | e. $\sqrt{119}$ | f. $\sqrt{181}$ |
| g. $\sqrt{38}$ | h. $\sqrt{92}$ | i. $\sqrt{18}$ |

16. Simplify $\sqrt{160}$

17. Simplify $\sqrt{54}$

18. Simplify $\sqrt{32}$