Name_____ Period _____

Practice 1.3

Locate each positive irrational number on the number line using rational approximations. First tell which two whole numbers the square root is between.

1. $\sqrt{3}$
2. $\sqrt{7}$
3. $\sqrt{11}$
4. $\sqrt{26}$
5. $\sqrt{34}$
6. $\sqrt{48}$

Locate each negative irrational number on the number line using rational approximations. First tell which two integers the square root is between.

7. $-\sqrt{5}$
8. $-\sqrt{6}$
9. $-\sqrt{17}$
10. $-\sqrt{26}$
11. $-\sqrt{53}$
12. $-\sqrt{80}$
13. $\sqrt{47}$
14. $-\sqrt{15}$
15. $\sqrt[3]{94}$

Locate each irrational number on the number line using rational approximations.

16. $\sqrt{101}$
17. $-\sqrt{132}$
18. $\sqrt{2,255}$

Solve.

19. Locate the value of the constant, π, on the number line using rational numbers.

20. 3.1416 and $\frac{22}{7}$ are two rational approximate values of π.

    a) Graph 3.1416, $\frac{22}{7}$, and π on the number line.

    b) Which of the two rational approximate values is closer to π?