1-3 Homework ~~EVEN #s ONLY~~

Simplify each expression.
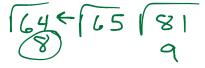
1. $\sqrt{144}$

2. $\sqrt{25} = 5$

3. $\sqrt{169}$

4. $\sqrt{49}$

5. $\sqrt{256}$

6. $\sqrt{400}$

7. $\sqrt{\dfrac{9}{49}}$

8. $\sqrt{\dfrac{196}{144}} = \dfrac{14}{12} = \dfrac{7}{6}$

9. $\sqrt{0.01}$

10. $\sqrt{0.49}$

Estimate the square root. Round to the nearest integer.

11. $\sqrt{38}$

12. $\sqrt{65}$

$\sqrt{64} \leftarrow \sqrt{65} \quad \sqrt{81}$
$\quad \boxed{8} \qquad\qquad\quad 9$

13. $\sqrt{99}$

14. $\sqrt{145.5}$

15. $\sqrt{23.75}$

16. $\sqrt{64.36}$

Find the approximate side length of each square figure to the nearest whole unit.

17. a tabletop with an area 25 ft^2

18. a wall that is 105 m^2

1-3   **Homework** (continued)

Name the subset(s) of the real numbers to which each number belongs.

19. $\dfrac{3}{4}$

20. -8 *rational* *integers*

21. 2π

22. $45{,}368$

23. $\sqrt{11}$

24. $-\dfrac{2}{3}$

Compare the numbers in each exercise using an inequality symbol.

$\dfrac{1}{3} = 0.3333\ldots$

25. $\sqrt{36},\sqrt{49}$

26. $\dfrac{1}{3},\sqrt{1.25}$ $\sqrt{1.25} = 1.1180\ldots$ $\dfrac{1}{3} < \sqrt{1.25}$

27. $\sqrt{100},-\sqrt{169}$

28. $\dfrac{34}{19},1.8$

Order the numbers in each exercise from least to greatest.

1.25
$\dfrac{1}{3} = 0.333\ldots$
$\sqrt{1.25} = 1.118\ldots$

29. $2.75,\sqrt{25},-\sqrt{36}$

30. $1.25,\dfrac{1}{3},\sqrt{1.25}$

$\sqrt{1.25}$ $\dfrac{1}{3}$ 1.25 0   1   2

$\dfrac{1}{3},\sqrt{1.25},1.25$

31. $\dfrac{3}{5},-0.6,\sqrt{1}$

32. $\dfrac{80}{25},\sqrt{9},\dfrac{30}{9}$

33. Kate, Kevin, and Levi are comparing how fast they can run. Kate was able to run 5 miles in 47.5 minutes. Kevin was able to run 8 miles in 74 minutes. Levi was able to run 4 miles in 32 minutes. Order the friends from the fastest to the slowest.