

74 Approximating Square Roots

pg. 313-314 #9-14, 20-24, 26-28, 35, 37

9. 0 whole

10. $\sqrt[3]{343}$ Nat

11. $\frac{\pi}{6}$ irrational

12. $-\sqrt{81}$ Integer

13. -1.25 Rational

14. $\frac{52}{13}$ rational

20. $a = 7$ $b = 6.8$

21. $a = -26$ $b = 26.2$

22. $a = -8$ $b = -7.8$

23. $a = -10$ $b = -10.2$

24. $a = 3$ $b = 2.6$


26. 10 is greater, because $10 = \sqrt{100}$ & $\sqrt{100} > \sqrt{20}$

27. $\sqrt{15}$ is greater because $\sqrt{15} > 0$ & $-3.5 < 0$

28. $\sqrt{133} > 10\frac{3}{4}$ because $\sqrt{133} > 11$ & $11 > 10\frac{3}{4}$

35. The side length is 8.1 feet

7.4 Approximating Square Roots

37. The diagonal line is c 

6 & 6 will be my a & b

$$a^2 + b^2 = c^2$$

$$6^2 + 6^2 = c^2$$

$$36 + 36 = c^2$$

$$\sqrt{72} = \sqrt{c^2}$$

$$8.5 = c$$

The diagonal line is 8.5 feet