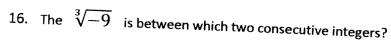
Name:	Date:
Square Roots	
1. Evaluate: $\sqrt{81}$	
2. Evaluate: $\sqrt{64}$	
3. Evaluate: $\sqrt{121}$	
4. The $\sqrt{110}$ is between which two positive consecutive integers?	
and	
5. The $\sqrt{40}$ is between which two positive consecutive integers?	
and	
6. The $\sqrt{51}$ is between which two positive consecutive integers?	
and	

7. The $\sqrt{80}$ is between which two positive consecutive integers?			
and			
8. The $\sqrt{8}$ is between which two positive consecutive integers?			
and			
Cube Roots			
Evaluate:			
9. $\sqrt[3]{27}$ 10. $\sqrt[3]{216}$			
11. $\sqrt[3]{-343}$ 12. $\sqrt[3]{-512}$			
13. The $\sqrt[3]{300}$ is between which two consecutive integers?			
14. The $\sqrt[3]{50}$ is between which two consecutive integers?			
and			

15. The	√-1001	is between which two consecutive integers?
	and	



and	

17. Explain in your own words why $\sqrt{-4}$ is not possible.

18. Explain in your own words why $\sqrt[3]{-8}$ is possible.

19. The volume of a cube is 64 blocks. What is the length of one side of the cube?

20. The volume of a cube is 1000 blocks. What is the length of one side of the cube?

21. The area of a square welcome mat is 100 inches. How long is the length of one side?

22. The length of one side of a square baseball field is 90 feet. What is the area of the baseball field?

23. Order the following numbers from least to greatest.

$$\sqrt[3]{-64}$$

$$\sqrt[3]{210}$$

$$\sqrt[3]{8}$$

$$\sqrt{121}$$

$$-\sqrt{25}$$

$$\sqrt{10}$$

Simplify the radical (square root)

24.
$$\sqrt{8}$$

25.
$$\sqrt{27}$$

26.
$$\sqrt{128}$$

27.
$$\sqrt{162}$$

Formative Assessment: Practice Cube and Square Roots

Name: Answer Key Date:______

Square Roots

1. Evaluate:
$$\sqrt{81} = 9$$

2. Evaluate:
$$\sqrt{64} = 8$$

3. Evaluate:
$$\sqrt{121} = 11$$

4. The $\sqrt{110}$ is between which two positive consecutive integers?

5. The $\sqrt{40}$ is between which two positive consecutive integers?

[6] and [7]
$$\sqrt{36} < \sqrt{40} < \sqrt{49}$$

$$6 < \sqrt{40} < 7$$

6. The $\sqrt{51}$ is between which two positive consecutive integers?

$$7$$
 and 8 $599 < 551 < 564$ $7 < 551 < 8$

7. The $\sqrt{80}$ is between which two positive consecutive integers?

$$8$$
 and 9 $8 < 580 < 581 < 80 < 9$

8. The $\sqrt{8}$ is between which two positive consecutive integers?

and
$$3$$
 $\sqrt{4} < \sqrt{8} < \sqrt{9}$ $2 < \sqrt{8} < 3$

Cube Roots

Evaluate:

9.
$$\sqrt[3]{27} = 3$$
 10. $\sqrt[3]{216} = 6$

11.
$$\sqrt[3]{-343} = -7$$
 12. $\sqrt[3]{-512} = -8$

13. The $\sqrt[3]{300}$ is between which two consecutive integers?

G and
$$7$$
 $\sqrt[3]{216} < \sqrt[3]{300} < \sqrt[3]{343}$ $6 < \sqrt[3]{300} < \sqrt[3]{7}$

14. The $\sqrt[3]{50}$ is between which two consecutive integers?

3 and 4
$$3\sqrt{27} < 3\sqrt{50} < 3\sqrt{64}$$
 $3 < 3\sqrt{50} < 4$

15. The $\sqrt[3]{-1001}$ is between which two consecutive integers?

$$-11$$
 and -10 $3(-133)$ $< 3(-1000)$ $< 3(-1000)$ $< 3(-1000)$ < -10

16. The $\sqrt[3]{-9}$ is between which two consecutive integers?

$$-3$$
 and -2 $3/-9 < 3/-8 < 3/-9 < -2$

17. Explain in your own words why $\sqrt{-4}$ is not possible.

18. Explain in your own words why $\sqrt[3]{-8}$ is possible.

19. The volume of a cube is 64 blocks. What is the length of one side of the cube?

20. The volume of a cube is 1000 blocks. What is the length of one side of the cube?

21. The area of a square welcome mat is 100 inches. How long is the length of one side?

The length of one side of a square baseball field is 90 feet. What is the 22. area of the baseball field?

23. Order the following numbers from least to greatest.

$$\sqrt[3]{-64}$$
 $5<\sqrt[3]{210}<6$ $\sqrt[3]{8}$ $\sqrt{121}$ $-\sqrt{25}$ $\sqrt{10}$ $\sqrt{2}$ $\sqrt{2}$

Simplify the radical (square root)

24.
$$\sqrt{8} = \sqrt{4}\sqrt{2} = \sqrt{2\sqrt{2}}$$

25.
$$\sqrt{27}$$
 $\sqrt{9}\sqrt{3} = \sqrt{3}\sqrt{3}$

26.
$$\sqrt{128}$$
 $\sqrt{16} \sqrt{8} = \sqrt{16} \sqrt{4} \sqrt{2} \sqrt{8} \sqrt{2}$

27.
$$\sqrt{162}$$