Name:_____ Period:_____ Score: _____

HW 6-9 - Operations with Roots DAY 2

DO NOT USE A SCIENTIFIC CALCULATOR ON THIS ASSIGNMENT!

Simplify each expression.

1. $7\sqrt{45}$

2. $\sqrt{72}+\sqrt{50}-\sqrt{8}$

3. $\sqrt{6}\cdot\sqrt{15}$

4. $\dfrac{\sqrt{21}}{\sqrt{7}}$

5. $\dfrac{\sqrt{63}}{\sqrt{7}}$

6. $5\sqrt{72}$

7. $\sqrt{6}\cdot\sqrt{8}$

8. $3\sqrt{75}$

9. $4\sqrt{3}+2\sqrt{12}$

10. $\sqrt{14}\cdot\sqrt{21}$

11. $5\sqrt{12}$

12. $\dfrac{\sqrt{22}}{\sqrt{2}}$

13. $\dfrac{\sqrt{27}}{\sqrt{3}}$

14. $6\sqrt{7}-8\sqrt{7}-\sqrt{3}$

15. $9\sqrt{28}$

Simplify each expression.

16. $2\sqrt{45}+4\sqrt{20}$

17. $3\sqrt{10}\cdot 2\sqrt{15}$

18. $6\sqrt{49}$

19. $8\sqrt{15}+3\sqrt{20}-3\sqrt{15}-\sqrt{20}$

20. $5\sqrt{13}+6\sqrt{5}-\sqrt{13}+2\sqrt{5}$

Simplify the expression.

21. $\dfrac{10x^3y^9}{2x^2y^7}$

23. $\left(-4x^{-8}y^5\right)\left(9x^{15}y^{-2}\right)$

22. $\dfrac{12x^2y^4}{4x^6y^{-7}}$

24. $\left(-4x^3y^5\right)^4$

Change the fractions to a decimal.

25. $\dfrac{3}{11}$

26. $\dfrac{7}{16}$

Change the decimal to a fraction.

27. $0.\overline{57}$

Use the set of ordered pair to answer questions 28-30.

$\{(-5,6),(1,13),(-4,-4),(4,8),(-2,-4)\}$

28. State the domain.

29. State the range.

30. Is the set of ordered pairs a function? Explain.