

Name: _____ Period: _____

Radical and Exponents Practice

Simplify

1. $7^5 \cdot 7^2$

2. $\frac{p^2}{p^5}$

3. $(-2a^4b^6c^5)^3$

4. $\frac{9x^3}{y^2} \cdot \frac{y^4x^3}{8x^{-1}}$

5. $(-2x^{-3})^2$

Evaluate

6. $64^{4/3}$

7. $16^{5/4}$

8. $27^{-4/3}$

Simplify

9. $\left(\frac{1}{36}\right)^{1/2}$

10. $\sqrt[4]{80}$

Simplify

11. $\sqrt[4]{64}$

12. $\sqrt[4]{243}$

13. $(6^{1/2} \cdot 2^{1/3})^6$

14. $\frac{36^{4/5}}{36^{3/10}}$

15. $\sqrt[5]{32x^5}$



Solve

16. $\sqrt[3]{x-7} = -3$



17. $\sqrt[4]{3x} + 5 = 8$

18. $\sqrt[5]{2x} - 4 = -2$

19. The geometric mean of 10 and x is $5\sqrt{2}$.

Find x .

20. Find the distance between

$(-1,4)$ and $(3,1)$.