

AA2 Week 2 Block Day- Warm-up **No Calculator**

Simplify. **Show all work!!**

1. $32^{-1.2}$ 2. $-125^{\frac{2}{3}}$ 3. $2\sqrt[3]{2x^2} \cdot 5\sqrt[3]{12x}$

$$\frac{1}{64}$$

$$-25$$

$$20x\sqrt[3]{3}$$

Solve. Check for extraneous solutions.

4. $\sqrt{2x+1} = x-1$

$$x=4$$

Let $f(x) = 9 - x^2$ and $g(x) = x + 3$. Find the indicated expression.

5. $\frac{f}{g}(x)$

$$\frac{3-x, x \neq -3}{\text{or } -(x-3)}$$

6. $f \circ g(x)$

$$-x^2 - 6x$$

7. $g \circ f(-2)$

$$8$$

8. Find $f^{-1}(x)$.

Is the inverse a function?

$$f^{-1}(x) = \pm\sqrt{-x+9}$$

No, the inverse is not a function