A1 S2 w4d1 Chapter 6&7 Review 1

Alg I Week 4 Mon Warm Up

1. Skill 10: Solve a System of Linear Equations Algebraically & check your answer

   y = 2x

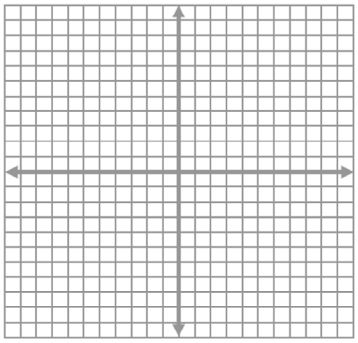
   y - 4 = -6x

   Check:

2. Skill 11: Solve a System of Linear Inequalities by graphing and CHECK.

   A. $y \geq \frac{1}{2}x$

   B. $x < 2$

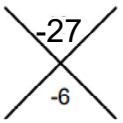
   Check:

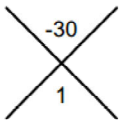
3. Skill 12: Simplify an Exponential Expression

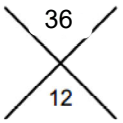
   Simplify, leaving no negative exponents.

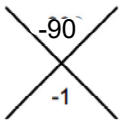
   $A)$ $\dfrac{x^{-1} \bullet \left(x^{-3}\right)^{2}}{x^{0}}$ $B)$ $\dfrac{\left(m^{3}\right)^{-2} \bullet m^{-1}}{m^{3} \bullet m^{2} \bullet m}$

4. Diamond Problems: What multiplies to make the top number and adds to make the bottom number?

   a. 

   b. 

   c. 

   d. 

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Algebra 1
Review #1 Chp 6/7

CW/HW

Name_____

1.Simplify, leaving your answer in exponent form with only positive exponents. Show work.

a) $c^{-2} \cdot c^{9}$ Answer:_____

b) w^{-6} Answer:_____

c) $(x^{10}y^{4})^{0}$ Answer:_____

d) $\frac{a^4}{a^{12}}$ Answer:_____

e) $(w^{-3})^{-5}$ Answer:_____

f) $\frac{12x^{-2}y}{15x^{4}y^{-3}}$ Answer:_____

g) $(5x^{4})^{2}$ Answer:_____

h) $-3a^{9} \cdot 7a$ Answer:_____

i) $(4x^{-7})^{3} \cdot (x^{8})^{2}$ Answer:_____

j) $\frac{c^{6} \cdot (c^{5})^{-3}}{c}$ Answer:_____

k) $\left(\frac{4x^{8}}{3y}\right)^{2}$ Answer:_____

2. Fill in the blanks for each problem.

a) $\sqrt[3]{216} =$_____because ___·___·___=_____

b) $\sqrt{81} =$ _____ because ___·___=_____

c) 2 = $\sqrt[3]{\ }$

d) $\sqrt[9]{56} = 56^{\square}$ (fraction exponent)

3. Evaluate. Show your work. Answers only will not get any credit. (Yes, these are fractional exponents.)

a) $144^{\frac{1}{2}}$ Answer:_____

b) $16^{\frac{3}{4}}$ Answer:_____

c) $27^{\frac{2}{3}}$ Answer:_____

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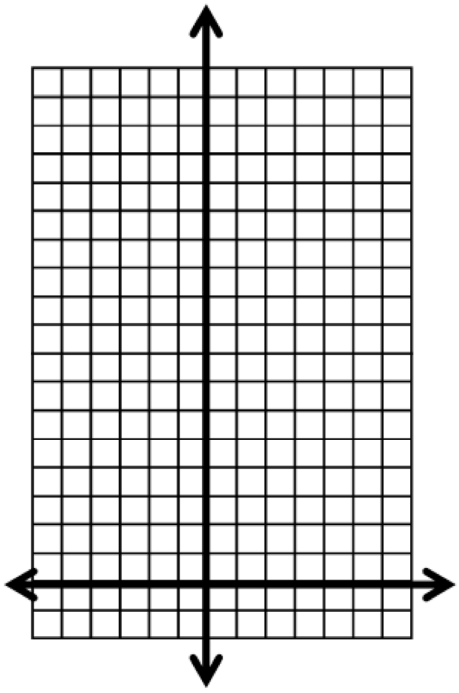
4. Using a chart, graph $y = 2 \cdot 3^x$

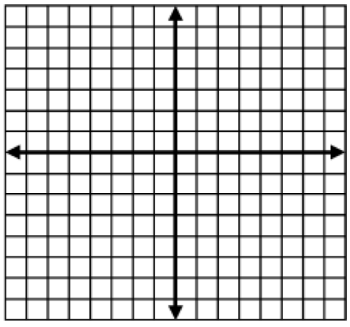
x	y
2	
1	
0	
-1	
-2	
-3	
-4	



*The scale is 1…do **NOT** change the scale!*

5. Solve by graphing

$x - 3y < -6$



6. Solve the system by **substitution method**.

$y = 2x + 7$

$2x - y = -7$

Answer:_____

7. Solve by elimination method.

$8x - 2y = 6$

$5x - 7y = -48$

8. Is (-7,4) a solution to this system of equations?

$4x + 9y = 8$

$2y = 22 + 2x$

Work:

Answer:_____

9. Is (3,-5) a solution to this system of inequalities?

$2x + 5y < -1$

$4y - x \geq 17$

Work:

Answer:_____