

A1 S2 w5d2 Ch 6&7 Review 2

Alg 1 Week 5 Tuesday Warm Up

1. Skill 10: Solve the system using and algebraic method and check your answer.

$$3x - 2y = 6$$

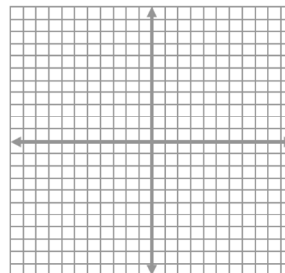
$$5x + 3y = -9$$

Check:

2. Skill 11: Solve the system of linear inequalities and check a point in the solution.

$$3x + 2y \leq 6$$

$$2x + 3y > 6$$

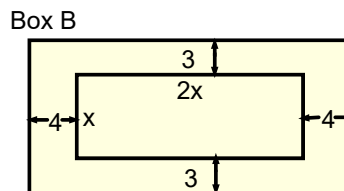
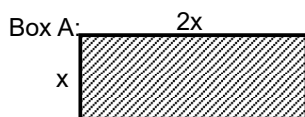


Check:

3. Skill 12: Simply Exponential Expressions. Simplify, leaving no negative exponents. Show all steps.

$$\frac{w \cdot w^{-2} \cdot (w^8)^{-3}}{w^0 \cdot w^{-25}}$$

4. Use the diagrams below to answer (a) and (b)



a) Write an expression for the area of box A. Use $A = bh$

b) Write an expression for the area of the entire box B.

5. Fill in the "diamond" problems. Multiply to make the top, add to make the bottom.

$$\begin{array}{c} 14 \\ \times \\ 9 \end{array}$$

$$\begin{array}{c} 6 \\ \times \\ -5 \end{array}$$

$$\begin{array}{c} -20 \\ \times \\ -1 \end{array}$$

$$\begin{array}{c} -18 \\ \times \\ -3 \end{array}$$

$$\begin{array}{c} -100 \\ \times \\ 0 \end{array}$$

6. Find the degree and the term for the following:

a) $6x - 4$

b) $3x^2 + 2xy - 7$

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Algebra 1 Week 4
Review #2 Chp 6/7

CW/HW

Name _____

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

a) $(w^7)^2$ Answer: _____

b) w^{-1} Answer: _____

c) $(500)^0$ Answer: _____

d) $c^8 \cdot c^4$ Answer: _____

e) $\frac{a^{-4}}{a^7}$ Answer: _____

f) $\frac{24x^2 y^8}{16x^4 y^{-3}}$ Answer: _____

g) $8a^9 \cdot 4a^{-17}$ Answer: _____

h) $(3x^6)^2 \cdot (4x^{-8})^2$ Answer: _____

i) $(2x^5 y)^3$ Answer: _____

j) $\frac{c^7}{c \cdot (c^2)^2}$ Answer: _____

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

2. Fill in the blanks for each problem.

a) $\sqrt[3]{8} = \underline{\hspace{1cm}}$ because $\underline{\hspace{1cm}} \cdot \underline{\hspace{1cm}} \cdot \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

b) $\sqrt{49} = \underline{\hspace{1cm}}$ because $\underline{\hspace{1cm}} \cdot \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

c) $4 = \sqrt[3]{\hspace{1cm}}$

d) $\sqrt[4]{x} = x^{\frac{\hspace{1cm}}{\hspace{1cm}}}$ (fraction exponent)

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

a) $125^{\frac{1}{3}}$ Answer: _____

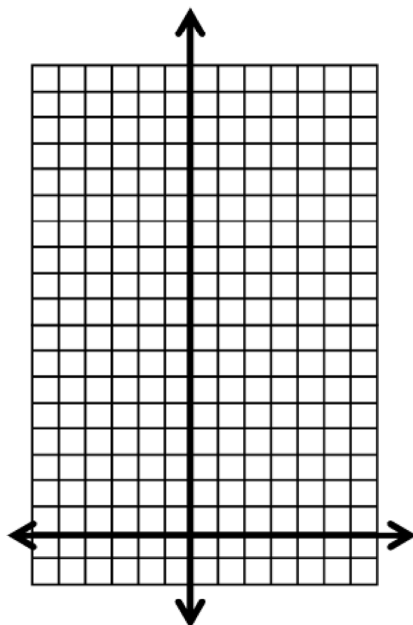
b) $4^{\frac{3}{2}}$ Answer: _____

c) $8^{\frac{5}{3}}$ Answer: _____

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4. Using a chart, graph $y = 2 \cdot \left(\frac{1}{3}\right)^x$

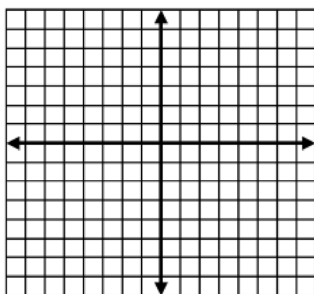
x	y
2	
1	
0	
-1	
-2	



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

5. Solve by graphing

$$x + 2y \leq 6$$



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

$$y = 3x + 7$$

$$2x - y = -2$$

7. Solve by elimination method.

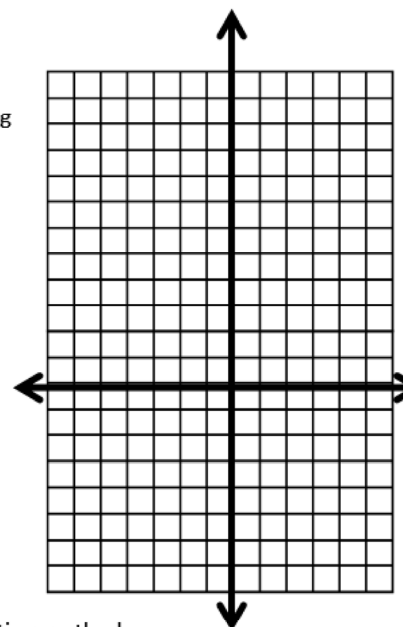
$$4x - 5y = -17$$

$$6x - 3y = -21$$

8. Solve by graphing

$$9x + 3y > 27$$

$$x - 2y \geq -4$$



9. Solve by elimination method

$$x - 2y = -4$$

$$9x + 3y = 27$$

Answer: _____

10. Is (2,3) a solution to this system of inequalities?

$$9x + 3y > 27$$

$$x - 2y \geq -4$$