Review Practice

correct order of operations: Remember the PEMDAS: Parenthesis, Exponents, Muttiplication, Division, Addition, Subtraction

FIRST

To receive credit, you must show your work.

1. Evaluate WITHOUT a calculator.

note:

$$(-3)^2 = 9$$

c.
$$-3^2 + 5 + 4 * 2$$

$$d. -5 - (-4) + (-10) - (-2)(3)$$

$$-5 + 4 - 10 + 6$$

$$= -1 - 10 + 6$$

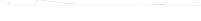
e.
$$12 \div 4 * 3 - 5$$

Here: Move left to right:

f. 3[5+6(7-3)+7]



Review Practice



Name

2. Simplify by combining like terms.

a.

$$-4a^{2}$$

$$3a^{2}-2b^{2}-7a^{2}-3b^{2} = -4a^{2}-5b^{2}$$

b. reed common denominators $\frac{1}{5}ab^2 - \frac{3}{10}ab^2 + \frac{2}{5}ab^2 + \frac{7}{10}ab^2$ $= \frac{2}{15}ab^2 - \frac{3}{10}ab^2 + \frac{2}{5}ab^2 + \frac{7}{10}ab^2$ $= \frac{2}{15}ab^2 - \frac{3}{10}ab^2 + \frac{2}{5}ab^2 + \frac{7}{10}ab^2$ $= \frac{2}{15}ab^2 - \frac{3}{10}ab^2$ $= \frac{3}{15}ab^2$

c.

$$3(2u^{2}+1)+4(u^{2}-5)$$
distribute
$$6u^{2}+3+4u^{2}-20$$
combine
$$10u^{2}+23$$

d.

$$3(2x-3y)-4(3x+5y)-x$$
distribute
$$6x-9y-12x-20y-x$$
combine
$$-7x-29y$$

e.

$$-5(x^{2}-4)-2(3x^{2}+6)+(2x^{2}-1)$$
distribute
$$-5x^{2}+20-6x^{2}-12+2x^{2}-1$$
combine
$$-9x^{2}+7$$

Review Practice

Below: when you see the phrase "a number"

- 3. Translate each English phrase into an algebraic expression.
 - a. Four increased by twice a number



b. Six less than two-thirds of a number

start:
$$\frac{2}{3}n$$

then "been six" or subtract six $s_0 = \frac{2}{3}n - 6$

c. Ten times the difference of a number and 14

$$\int_{10}^{10} (n-14) = 10(n-4)$$

d. Eight subtracted from the quotient of a number and seven

$$-8 \text{ is going } n/7$$
at the end
$$= \frac{n}{7} - 8$$

e. The quotient of a number and three less than the number



- 4. What is your major?
- 5. What is the highest math class you need to take?
- 6. What is the highest math class you want to take?