

Simplify each.

1. $9ab^2 + 8ab - a^2b + 4ab - 7ab^2 - 4ab$
 $2ab^2 + 8ab - a^2b$

2. $6x(3x - 1) - (3x^2 - 7x - 8) + 12x - 5x^2$
 $18x^2 - 6x - (3x^2 - 7x - 8) + 12x - 5x^2$
 $18x^2 - 6x - 3x^2 + 7x + 8 + 12x - 5x^2$
 $10x^2 + 13x + 8$

3. $\frac{7}{2}w(\frac{8w^2}{1} - \frac{10w}{1} + \frac{5}{1}) - 3w$
 $\frac{14w^3 - 35w^2}{2} + \frac{35}{4}w - \frac{3w}{4 \cdot 1}$
 $\boxed{\frac{14w^3 - 35w^2}{2} + \frac{35w}{4} - \frac{3w}{4}}$

Simplify.

1. $9c - 4(c + 7)$

$9c - 4c - 28$
 $5c - 28$

$$2. 4 + 3a(2a - 5) - (8a^2 + a - 11)$$

$$4 + 6a^2 - 15a - 8a^2 - a + 11$$

$$15 - 2a^2 - 14a$$

$$-2a^2 - 14a + 15$$

$$3. 4(x + 7) - 3(2x - 4)$$

$$4x + 28 - 6x + 12$$

$$-2x + 40$$

$$4. 6 + 2(4m - 9) - 12m + 10 - 5(3m + 7)$$

$$6 + 8m - 18 - 12m + 10 - 15 - 35$$

$$-37 - 19m$$

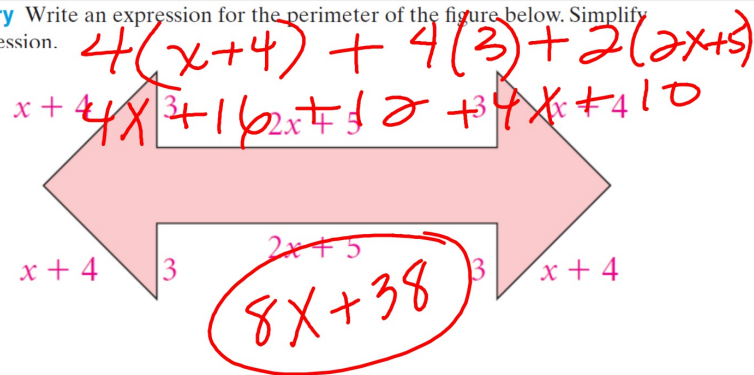
$$-19m - 37$$

$$5. 5 - 4a(2a - 3) + 6a + 2a^2 - 9$$

$$5 - 8a^2 + 12a + 6a + 2a^2 - 9$$

$$-6a^2 + 18a - 4$$

Geometry Write an expression for the perimeter of the figure below. Simplify the expression.



Review!

1.) There are 1760 yards in a mile. Write an equation for the number of miles in an unknown number of yards. Define your variables.

$$\frac{y}{1760} = m$$

$$y = y \text{ ds}$$

$$m = m \text{ l.}$$

2.) $7 - 10\{24 \div 6[-1 - (3 + 6 \div 2 - 5)]^2 + 5\}$

3.) Model each statement with an algebraic expression:

1. The product of eight and the quantity four more than a number.

$$8(4 + x)$$

2. The quotient of a number and eleven.

$$\frac{x}{11}$$

3. Six less than three times a number.

$$3x - 6$$

4.) State ALL sets of numbers to which each belongs:

$$\frac{35}{-7} \quad \frac{R}{-5} \quad \frac{I}{\sqrt{23}} \quad Irr$$

$$1.67 \quad R$$

$$1.454545 \quad R$$

$$\sqrt{49} \quad R \quad W \quad I \quad N$$

5.) Simplify:

$$4 - |-9| = -5 \quad |8| + |-10 + 6| = 8 + 4 = 12$$

6.) Evaluate for $H = -6$ $K = -3$ $J = 5$

1. $-H - K^2$

$$-(-6) - (-3)^2$$

$$6 - 9 = -3$$

6.) Evaluate for $H = -6$ $K = -3$ $J = 5$

2. $2J^2 - HK$

$$2(5)^2 - (-6)(-3)$$

$$50 - 18 = 32$$

6.) Evaluate for $H = -6$ $K = -3$ $J = 5$

3. $HJK - K + H^2$

$$\begin{aligned} & (-6)(5)(-3) - (-3) \\ & 90 + 3 + 36 + (-6)^2 \\ & \boxed{= 129} \end{aligned}$$

No bookwork!

- IXL #3 - A.2 & I.2 due Friday, Sept. 13th!