

Simplify each.

1.

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

$$2ab^2 + 8ab - a^2b$$

2.

$$6x(3x - 1) - (3x^2 - 7x - 8) + 12x - 5x^2$$

$$18x^2 - 6x - 3x^2 + 7x + 8 + 12x - 5x^2$$

$$10x^2 + 13x + 8$$

3. $\frac{7}{4}w(8w^2 - 10w + 5) - 3w$

$$14w^3 - \frac{35}{2}w^2 + \frac{35}{4}w - \frac{3w}{1}$$

$$14w^3 - \frac{35w^2}{2} + \frac{23}{4}w$$

Answers to HW #7

21. $1.5q + 8$

22. $18n - 42$

23. $\frac{5}{2} - \frac{15r}{16}$

24. $-4.5b + 13.5$

25. $2w + 4$

26. $-36 + 15n$

35. $-3t$

36. $20k^2$

37. $7x$

38. $24w$

39. $5v^2$

41. $-17q$

42. $-45x$

21. $0.25(6q + 32)$

22. $(3n - 7)(6)$

23. $(8 - 3r)\frac{5}{16}$

24. $-4.5(b - 3)$

25. $\frac{2}{5}(5w + 10)$

26. $(9 - 4n)(-4)$

35. $4t - 7t$

36. $12k^2 + 8k^2$

37. $9x - 2x$

38. $w + 23w$

39. $-18v^2 + 23v^2$

40. $7m - m$

41. $13q - 30q$

42. $x - 46x$

Simplify.

$$\begin{aligned} 1. \quad 9c - 4(c + 7) &= 9c - 4c - 28 \\ &= 5c - 28 \end{aligned}$$

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

$$4 + \underline{6a^2} - 15a - \underline{8a^2} - \underline{a} + 11$$

$$- 4a^2 - 16a + 15$$

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

$$4x + 28 - 6x + 12$$
$$= -2x + 40$$

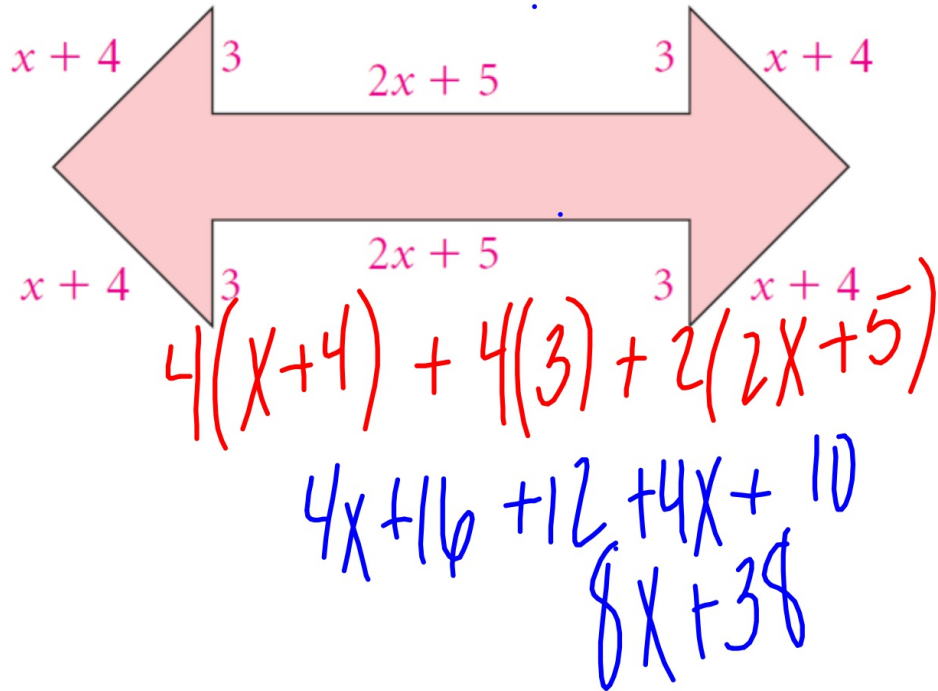
4. $6 + 2(4m - 9) - 12m + 10 - 5(3m + 7)$

$$\begin{aligned} & \underline{6} + 8m - \underline{18} - 12m + \underline{10} - 15m - \underline{35} \\ & \quad - 19m - 37 \end{aligned}$$

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

$$\begin{aligned} & 5 - \underline{8a^2} + \underline{12a} + \underline{6a} + \underline{2a^2} - 9 \\ & \quad - 6a^2 + 18a - 4 \end{aligned}$$

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



YOUR FIRST TEST!

Monday, Sept. 17th!

- Over Sections 1.1 - 1.7
- Take out a sheet a paper to write out a review for yourself!



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.

$$m = 1760y$$

$y = \text{yards}$
 $m = \text{miles}$

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

$$\begin{aligned} & [-1 - (3 + 3 - 5)]^2 \\ & [-1 - (1)]^2 \\ & 7 - 10\{24 \div 6[-2]^2 + 5\} \\ & 7 - 10\{24 \div 6(4) + 5\} \\ & 7 - 10\{4(4) + 5\} \\ & 7 - 10(21) \end{aligned}$$

$7 - 210$
 $= -203$

3.) Model each statement with an algebraic expression:

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

$$8(x+4)$$

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:

$$\frac{35}{-7} = -5$$

$\mathbb{R}, \mathbb{I}$

$$\sqrt{23}$$

irr.

$$1.67$$

$\mathbb{R}$

$$1.4545\overline{45}$$

$\mathbb{R}$

$$\sqrt{49} = \mathbb{R}, \mathbb{W}, \mathbb{I}, \mathbb{N}$$

5.) Simplify:

$$\begin{aligned} & 4 - |-9| \\ & \quad \quad \quad \underline{\quad \quad} \\ & 4 - 9 \\ & \quad \quad \quad = -5 \end{aligned}$$

$$\begin{aligned} & |8| + |-10 + 6| \\ & \quad \quad \quad \swarrow \\ & 8 + |-4| \\ & \quad \quad \quad = 8 + 4 = 12 \end{aligned}$$

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

$$\begin{aligned} 1. \quad -H - K^2 &= -(-6) - (-3)^2 \\ & \quad \quad \quad 6 \quad - 9 = -3 \end{aligned}$$

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

$$\begin{aligned} 2. \quad 2J^2 - HK &= 2(5)^2 - (-6)(-3) \\ &50 - 18 = 32 \end{aligned}$$

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

$$\begin{aligned} 3. \quad HJK - K + H^2 &= (-6)(5)(-3) - (-3) + (-6)^2 \\ &90 + 3 + 36 = 129 \end{aligned}$$

No bookwork!

- IXL #3 - A.2 & I.2 due Friday, Sept. 14th!