

Solve the equations below for the specified variable:

1.) $P = 2L + 2W$; W

$$\frac{P - 2L}{2} = 2W$$

$$W = \frac{P - 2L}{2}$$

$W = \frac{P - 2L}{2}$ (circled)

2.) $A = (1/2)bh$; b

$$A = \frac{1}{2}bh$$

$$2A = bh$$

$$b = \frac{2A}{h}$$

3.) Write the equation of the line that fits the table.

$m = 4$

$b = 7$

$y = 4x + 7$ (circled)

| x | 0 | y | 7 |
|---|---|----|----|
| 1 | | 11 | +4 |
| 2 | | 15 | +4 |
| 3 | | 19 | +4 |
| 4 | | 23 | +4 |
| 5 | | 27 | +4 |

4.) Write the equation of the line that passes between the points (2, 4) and (2, -11).

$m = \frac{-11 - 4}{2 - 2} = \frac{-15}{0}$

$m = \text{undef.}$

$x = 2$ (circled)

#12 $(3x^2 + x - 4) - (4x - 6 + 8x^2)$

$3x^2 + x - 4 - 4x + 6 - 8x^2$

$-5x^2 - 3x + 2$ (circled)

Multiplying Monomials

- **Step 1:** Multiply the coefficients.
- **Step 2:** Add the exponents

PRODUCT RULE:

$$(X^a)(X^b) = X^{a+b}$$

EASY

1. $x^2 \cdot x^3$

$$x^{2+3} = x^5$$

2. $a^9 \cdot a$

$$a^{9+1} = a^{10}$$

3. $(4x^2) \cdot (3x^5)$

$$12x^7$$

$$4(3) = 12$$

$$x^2 \cdot x^5 = x^7$$

MEDIUM

7. $(8x^4y^2)(-3x^4y^9)$

$$-24x^8y^{11}$$

8. $2y \cdot -5y^2 \cdot 3y^3$

$$-30y^6$$

9. $(-2xy)(xy)(3x^2y^3)$

$$-6x^4y^5$$

HARD

16. $(2x^5y^2)(4xy^3) + (x^4y^4)(3x^2y)$

$$8x^6y^5 + 3x^6y^5$$

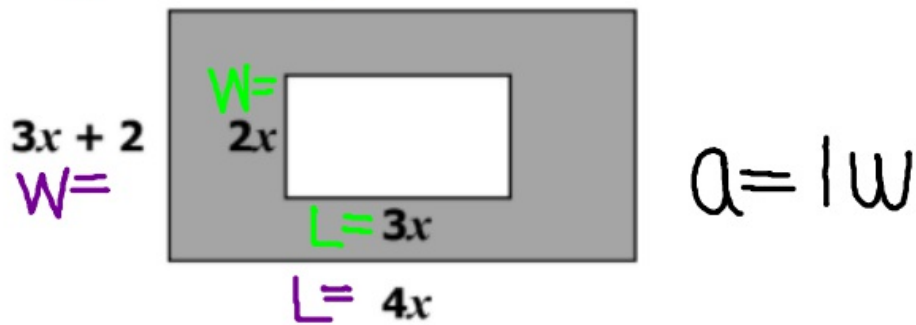
$$11x^6y^5$$

17. $(4a^3b^4)(5ab^2) + (a^2b^5)(-2a^2b)$

$$20a^4b^6 + (-2a^4b^6)$$

$$18a^4b^6$$

Write an expression to represent the area of the shaded region in simplest form.



$$\text{Area}_{\text{shaded region}} = \text{Area}_{\text{big}} - \text{Area}_{\text{small}}$$

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

$$= 12x^2 + 8x - 6x^2$$

Area of shaded = $6x^2 + 8x$
Region

Classwork: HW #2 Monomial x Polynomial

Answers listed below in no particular order.

$$-11c^2 - 4c$$

$$2y^2 - 8y$$

~~$$6x^2 + 8x$$~~

$$5z^2 - 5z$$

$$2x^2 - 5x$$

$$20a^3 - 7a$$

$$4a^2 + 3a$$

$$-4y^3 - y^2$$

$$6n^4 - 6n^3 - 12n^2$$

$$-12h^2 - 20h$$

$$3w^2 + 7w$$

$$-3n^3 - 6n^2$$

$$6x^3 - 3x^2 + 8x$$

$$7c^4 - 14c^3 + 35c$$

$$12n^3 + 5n^2 - 19n$$

$$18b^2 + 2b + 8$$

$$15x^3 - 3x^2 + 12x$$

$$x^3 - 2x^2 - 10x$$

$$6m^2 + 6m - 3$$

$$28x^2 - 6x - 12$$