

1. a) True b) False c) True d) False e) False
f) True

2. a) No. b) Yes. c) No. d) No. e) Yes

3. a) $7x^2 - x + 9$ b) $15x^4y^5$ c) $2a^2$ d) $24a + b$

e) $4xy^2 - 3x^2 + 1$ f) $4a + 10b$ g) $9x - 5$ h) $29x$

i) $x - 4$ j) 3 k) 4^4a^8 l) a^2b

4. a) should have $-x^4 + 7x^2y$ instead of x^4

b) should be $-2ab^2 - 2a^2b$ instead of $-2ab^2 + 2a^2b$

5. a) $2x - 2y + 5$ b) $a^2 - 2b$ c) $2a^2$ d) $12x^2y^2$

$$2 \frac{24x^2y^3 + 12x^3y^5}{12x^2y^2} = 2y + xy^3$$

$$a(x+2) = ax + 2a$$

$$(x+2)(x+2)$$

1. Write the following as a base raised to a power:

$$4 \times 64 \times \sqrt{4} \times \frac{1}{4}$$

2. Convert the following into scientific notation:

0.000,005,67 -5.67×10^{-6}

3. Does $(3a)^4 = 3a^4$? Why or why not?

2^7 $4^{3.5}$ $3a a a a$
 $4^1 \times 4^3 \times 4^{\frac{1}{2}} \times 4^{-1} = 4^{3.5}$ $(3a)^4$
 $(3a)^4 = (3a)(3a)(3a)(3a)$

	Right	Wrong
Question 1	14	11
2	18	7
3	22	3

Multiplying Binomials

What is a binomial?

$\underbrace{\quad\quad}_2$

Binomial: *two terms* e.g. $x+2$

What is the area of this figure?

$x + 2$

$(x+2)(x+2)$

$(x+2)x + (x+2)2$

$(x+2)(x+2)$

$x^2 + 2x + 2x + 4$

$x^2 + 4x + 4$

What if we're only given $(x+2)(x+2)$ without the shape to help us? How would we solve?

Hint: There are still four parts.

1	3
2	4

Remember to combine like terms at the end!



Try it again: What if we have $(2x-3)(x-2)$?

F: $2x^2$ O: $-4x$

I: $-3x$ L: $+6$

$2x^2 - 7x + 6$

$(2x-3)(x-2)$

$(ab^2 - b)$

What if we have something like $(ab^2 + b)(a - b)$?

F: a^2b^2	O: $-ab^3$
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I: ba

L: $-b^3$

$a^2b^2 - ab^3 + ba - b^3$

e) $(2x+3)^2$

$(2x+3)(2x+3)$