

Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Multiplying Polynomials**

When multiplying polynomials, use the \_\_\_\_\_ property!!!

1. Rewrite distributing the \_\_\_\_\_ to each term of the polynomial.
2. \_\_\_\_\_ coefficients
3. \_\_\_\_\_ exponents
4. Write in \_\_\_\_\_ form.

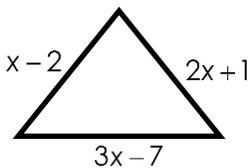
1.  $4x(3x^2 + 4x - 8)$

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

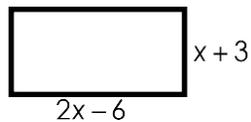
3.  $(2x+3)(4x+1)$

4.  $(x+1)(x^2 + x - 1)$

5. Perimeter:



6. Area:



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1. What is the simplest form of  $\sqrt{208x^2}$  ?

A.  $4x\sqrt{13}$

B.  $2x\sqrt{52x}$

C.  $8x\sqrt{13}$

D.  $13x\sqrt{2x}$ 

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2. Which is equivalent to  $-2\sqrt{5} - 16\sqrt{5} - 5\sqrt{5}$  ?

A.  $-19\sqrt{5}$

B.  $-9\sqrt{5}$

C.  $-23\sqrt{5}$

D.  $23\sqrt{5}$ 

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3. Simplify:  $6\sqrt{2} \cdot 2\sqrt{8}$

A. 48

B.  $8\sqrt{20}$

C.  $6\sqrt{16}$

D.  $12\sqrt{8}$ 

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4. Brittany is working on getting in shape for tennis season. The coaches tell her she needs to run 5 km two times a week. If she does this for 10 weeks, how many meters will she run?

A. 50 km

B. 50,000 m

C. 100,000 km

D. 100,000 m

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5. Zoe has to attend school for 6 years to be a lawyer. How many days will she be in school?

a. 182 days

b. 546 days

c. 2190 days

d. 2184 days

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6. Add:  $(-5x^2 + 3x - 8) + (-3x^2 - 4x - 9)$

a.  $-2x^2 - 7x - 17$

c.  $-2x^2 - 7x - 11$

b.  $-8x^2 - x - 17$

d.  $-8x^2 - 7x - 17$ 

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7. Subtract:  $(-5x^2 + x - 5) - (-3x^2 - 8x - 3)$

a.  $-2x^2 - 7x - 2$

c.  $-2x^2 + 9x - 8$

b.  $-2x^2 + 9x + 5$

d.  $-2x^2 + 9x - 2$ 

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8. Multiply:  $4x^2(-x^2 + 5x + 4)$

a.  $-4x^3 + 20x^2 + 16x$

c.  $-4x^4 + 20x^3 + 16x^2$

b.  $20x^2 + 4x + 16$

d.  $-3x^2 + 9x + 8$ 

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