

Name:

Partners:

Math 2

Date:

Review 1 Version A

[A] Circle whether each statement is true or false.

T F 1.  $2s^{-1} = \frac{1}{2s}$

T F 2.  $\frac{a^5b^5}{a^5b^5} = b^{-10}$

T F 3.  $6 \times \frac{1}{7} = \frac{6}{42}$

T F 4.  $\left(\frac{h^3}{10q^9}\right)^{-1} = \left(\frac{10q^9}{h^3}\right)$

T F 5.  $8 + 2\sqrt{x} = 10\sqrt{x}$

T F 6.  $1 - .04\% = .9996$

T F 7.  $\sqrt{9x^2 + 25} = 3x + 5$

T F 8.  $(3x + 5)^2 = 9x^2 + 25$

T F 9.  $(x^2 + 10x + 21) \div (x + 3) = x + 7$

T F 10.  $(7 \times 10^{29}) + (4 \times 10^{28}) = 7.4 \times 10^{29}$

T F 11. The leading coefficient of  $9x - \frac{x^2}{4}$  is  $-\frac{1}{4}$ .

T F 12. The value of  $0.18^{30}$  is between 4 and 5.

T F 13.  $(10x^3 - 5x) - (14x^2 - 2x) = 10x^3 - 14x^2 - 3x$

T F 14. The expression  $-12x^2$  is a quadratic monomial.

T F 15. The expression  $9x + 20 \cos 4x$  has three terms.

T F 16. The product of any two cubic polynomials is a sixth degree polynomial.

T F 17. In the expression  $8x + \sqrt{x + 2}$ ,  $x + 2$  is the argument of the square root function.

T F 18.  $A = 229 \times 10^{16}$  and  $B = 2.29 \times 10^{18}$  are equal, but only  $B$  is written in scientific notation.

**[B] Simplify completely. Write answers without parentheses or negative exponents.**

1.  $\frac{15a^2\sqrt{6b}}{9a^4 + 6a^3}$

2.  $2(3x^4)^{-2}$

3.  $10(2x + 1)^2$

4.  $5\left(\frac{10a^5}{20b}\right)^{-2}$

5.  $6\left(\frac{5\sqrt{2x}}{9}\right)$

6.  $(x + 10)(x + 2)(x - 2)$

**[C] Solve. Show exact answers, and then round to the nearest hundredth.**

1.  $\frac{1}{2}(8x - 1) = 6$

2.  $3x^2 = 6$

**[D] Do the following to organize your group's reviews.**

1. Make sure your name and your partners' names are at the top of your review the first day.
2. Staple the reviews in order, all facing the same way. Put the staple in the very top left corner if everyone is finished or if the review is due; otherwise put the staple in the top right corner.

Name:

Math 2

Date:

Review 1 Version B

[A] Circle whether each statement is true or false.

T F 1.  $2s^{-1} = \frac{1}{2s}$

T F 2.  $\frac{a^5b^5}{a^5b^5} = b^{-10}$

T F 3.  $6 \times \frac{1}{7} = \frac{6}{42}$

T F 4.  $\left(\frac{h^3}{10q^9}\right)^{-1} = \left(\frac{10q^9}{h^3}\right)$

T F 5.  $8 + 2\sqrt{x} = 10\sqrt{x}$

T F 6.  $1 - .04\% = .9996$

T F 7.  $\sqrt{9x^2 + 25} = 3x + 5$

T F 8.  $(3x + 5)^2 = 9x^2 + 25$

T F 9.  $(x^2 + 10x + 21) \div (x + 3) = x + 7$

T F 10.  $(7 \times 10^{29}) + (4 \times 10^{28}) = 7.4 \times 10^{29}$

T F 11. The leading coefficient of  $9x - \frac{x^2}{4}$  is  $-\frac{1}{4}$ .

T F 12. The value of  $0.18^{30}$  is between 4 and 5.

T F 13.  $(10x^3 - 5x) - (14x^2 - 2x) = 10x^3 - 14x^2 - 3x$

T F 14. The expression  $-12x^2$  is a quadratic monomial.

T F 15. The expression  $9x + 20 \cos 4x$  has three terms.

T F 16. The product of any two cubic polynomials is a sixth degree polynomial.

T F 17. In the expression  $8x + \sqrt{x + 2}$ ,  $x + 2$  is the argument of the square root function.

T F 18.  $A = 229 \times 10^{16}$  and  $B = 2.29 \times 10^{18}$  are equal, but only  $B$  is written in scientific notation.

**[B] Simplify completely. Write answers without parentheses or negative exponents.**

1.  $\frac{18ab^4\sqrt{6b}}{9ab^4 + 9ab^3}$

2.  $20y(3x^5)^{-2}$

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

4.  $3\left(\frac{12a^5}{8b^4}\right)^{-2}$

5.  $6\left(\frac{5 + \sqrt{2x}}{9}\right)$

6.  $10(x + 1)(x + 3)(x - 3)$

**[C] Solve. Show exact answers, and then round to the nearest hundredth.**

1.  $\frac{1}{2}(8x - 5) = 4x + 6$

2.  $3x^2 = 15$

**[D] Bonus**

1. Find two polynomials whose product is the given polynomial.

a)  $x^2 + 20x + 100$

b)  $x^2 + 12x + 20$

Name:

Math 2

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Review 1 Version C

[A] Circle whether each statement is true or false.

T F 1.  $2s^{-1} = \frac{1}{2s}$

T F 2.  $\frac{a^5b^5}{a^5b^5} = b^{-10}$

T F 3.  $6 \times \frac{1}{7} = \frac{6}{42}$

T F 4.  $\left(\frac{h^3}{10q^9}\right)^{-1} = \left(\frac{10q^9}{h^3}\right)$

T F 5.  $8 + 2\sqrt{x} = 10\sqrt{x}$

T F 6.  $1 - .04\% = .9996$

T F 7.  $\sqrt{9x^2 + 25} = 3x + 5$

T F 8.  $(3x + 5)^2 = 9x^2 + 25$

T F 9.  $(x^2 + 10x + 21) \div (x + 3) = x + 7$

T F 10.  $(7 \times 10^{29}) + (4 \times 10^{28}) = 7.4 \times 10^{29}$

T F 11. The leading coefficient of  $9x - \frac{x^2}{4}$  is  $-\frac{1}{4}$ .

T F 12. The value of  $0.18^{30}$  is between 4 and 5.

T F 13.  $(10x^3 - 5x) - (14x^2 - 2x) = 10x^3 - 14x^2 - 3x$

T F 14. The expression  $-12x^2$  is a quadratic monomial.

T F 15. The expression  $9x + 20 \cos 4x$  has three terms.

T F 16. The product of any two cubic polynomials is a sixth degree polynomial.

T F 17. In the expression  $8x + \sqrt{x + 2}$ ,  $x + 2$  is the argument of the square root function.

T F 18.  $A = 229 \times 10^{16}$  and  $B = 2.29 \times 10^{18}$  are equal, but only  $B$  is written in scientific notation.

**[B] Simplify completely. Write answers without parentheses or negative exponents.**

1.  $\frac{18b^3\sqrt{6b}}{8ab^4 + 6ab^3}$

2.  $15y(3x^5)^{-2}$

3.  $2(3x - 5)^2$

4.  $3\left(\frac{12a}{14b^4}\right)^{-2}$

5.  $6\left(\frac{x-1}{9} + \frac{\sqrt{2x}}{9}\right)$

6.  $x(x + 5)(x + 2)(x - 2)$

**[C] Solve. Show exact answers, and then round to the nearest hundredth.**

1.  $\frac{1}{4}(8x - 9) = 2x + 3$

2.  $2x^2 = 11$

**[D] Bonus**

1. Find two polynomials whose product is the given polynomial.

a)  $x^2 + 10x + 25$

b)  $x^2 + 12x + 35$

Name:

Math 2

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Review 1 Version D

[A] Circle whether each statement is true or false.

T F 1.  $2s^{-1} = \frac{1}{2s}$

T F 2.  $\frac{a^5b^5}{a^5b^5} = b^{-10}$

T F 3.  $6 \times \frac{1}{7} = \frac{6}{42}$

T F 4.  $\left(\frac{h^3}{10q^9}\right)^{-1} = \left(\frac{10q^9}{h^3}\right)$

T F 5.  $8 + 2\sqrt{x} = 10\sqrt{x}$

T F 6.  $1 - .04\% = .9996$

T F 7.  $\sqrt{9x^2 + 25} = 3x + 5$

T F 8.  $(3x + 5)^2 = 9x^2 + 25$

T F 9.  $(x^2 + 10x + 21) \div (x + 3) = x + 7$

T F 10.  $(7 \times 10^{29}) + (4 \times 10^{28}) = 7.4 \times 10^{29}$

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T F 13.  $(10x^3 - 5x) - (14x^2 - 2x) = 10x^3 - 14x^2 - 3x$

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T F 16. The product of any two cubic polynomials is a sixth degree polynomial.

T F 17. In the expression  $8x + \sqrt{x + 2}$ ,  $x + 2$  is the argument of the square root function.

T F 18.  $A = 229 \times 10^{16}$  and  $B = 2.29 \times 10^{18}$  are equal, but only  $B$  is written in scientific notation.

**[B] Simplify completely. Write answers without parentheses or negative exponents.**

1.  $\frac{18a^2\sqrt{6b}}{9ab^4 + 6ab^3}$

2.  $6x(3x^5)^{-2}$

3.  $-2(4x - 5)^2$

4.  $3acd^{-1}\left(\frac{12a^5}{16b^{-4}}\right)^{-2}$

5.  $-6\left(\frac{x-8}{9} + \frac{\sqrt{2x}}{9}\right)$

6.  $10x^3(x - 4)(x + 1)(x + 4)$

**[C] Solve. Show exact answers, and then round to the nearest hundredth.**

1.  $\frac{1}{4}(8x - 13) = 9x + 6$

2.  $3x^2 = 11$

**[D] Bonus**

1. Find two polynomials whose product is the given polynomial.

a)  $x^2 - 20x + 100$

b)  $x^2 + 20x + 96$