

1. Divide.

$$(x^2 - 13x + 40) \div (x - 5)$$

$$(x^2 - 13x + 40) \div (x - 5) = \underline{\hspace{2cm}}$$

2. Multiply.

$$(m + 11n)^2$$

$$(m + 11n)^2 = \underline{\hspace{2cm}}$$

(Simplify your answer.)

3. Multiply.

$$(x + 2)(x + 7)$$

$$(x + 2)(x + 7) = \underline{\hspace{2cm}}$$

(Simplify your answer.)

4. Simplify.

$$(2x^7)^2 (6x^6)$$

$$(2x^7)^2 (6x^6) = \underline{\hspace{2cm}}$$

(Simplify your answer. Use positive exponents only.)

5. Multiply.

$$(x + 7)(x - 4)$$

$$(x + 7)(x - 4) = \underline{\hspace{2cm}}$$

(Simplify your answer.)

6. Subtract.

$$(4a^3 + a - 8) - (2 - 8a^3 - 6a^2)$$

$$(4a^3 + a - 8) - (2 - 8a^3 - 6a^2) = \underline{\hspace{2cm}} \text{ (Simplify your answer.)}$$

7. Express the number in decimal form (without exponents).

$$6.16 \times 10^6$$

The answer is .

8. Add.

$$(3x^2 - 7x + 15) + (2x^2 + 9x - 45)$$

The answer is .
(Simplify your answer.)

9. Express the following number in decimal notation.

$$3.47 \times 10^{-6}$$

$$3.47 \times 10^{-6} = \underline{\hspace{2cm}}$$

10. Find the quotient.

$$\frac{10w^8p^9 - 14w^6p^7 + 18w^3p^4}{2w^3p}$$

The quotient is

 .

11. Express the number 0.000722 in scientific notation.

$$0.000722 = \underline{\hspace{2cm}}$$

(Use scientific notation. Use the multiplication symbol in the math palette as needed.)

12. Multiply.

$$(x + 13)(x - 13)$$

$$(x + 13)(x - 13) = \underline{\hspace{2cm}}$$

(Simplify your answer.)

13. Simplify. Do not use negative exponents in the answer.

$$\frac{20x^{-2}y^3z^8}{15x^5y^{-7}z^{-3}}$$

$$\frac{20x^{-2}y^3z^8}{15x^5y^{-7}z^{-3}} = \underline{\hspace{2cm}}$$

(Simplify your answer. Use integers or fractions for any numbers in the expression. Use positive exponents only.)

14. Express the following number in scientific notation.

$$5,700,000$$

$$5,700,000 = \underline{\hspace{2cm}}$$

(Use the multiplication symbol in the math palette as needed.)

15. Multiply using the rule for the square of a binomial.

$$(x - 11)^2$$

$$(x - 11)^2 = \underline{\hspace{2cm}}$$