

Algebra 1 – Board Problems – Chapter 18

- 1) Five times the second of three consecutive even integers is six more than twice the sum of the first and third integers. Find the middle even integer.
- 2) Three times the second of three consecutive even integers is twelve less than twice the sum of the first and third integers. Find the largest even integer.
- 3) The sum of three consecutive even integers is negative forty-eight. Find the smallest integer.
- 4) Four times the smallest of three consecutive integers is three more than three times the largest.

Name _____

Solve simultaneous equations by SUBSTITUTION.

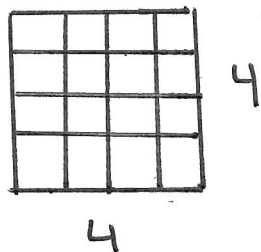
1. $-2x + 6y = 6$
 $-7x + 8y = -5$

Solve simultaneous equations by ELIMINATION.

2. $2x + y = 20$
 $6x - 5y = 12$

3. $8x + 14y = 4$
 $-6x - 7y = -10$

ALG I - Ch. 18 MULTIPLICATION/DIVISION OF EXPONENTS



$$4 \times 4 = 4^2$$

WHAT IS THE OPPOSITE OF SQUARING? _____

$$\sqrt{25} =$$

$$\sqrt{225} =$$

$$\sqrt{121} =$$

WHY DO WE CONSIDER THE NEGATIVE SQUARE?

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

$$2^3 \cdot 2^4 = \underline{\quad}$$

$$3^2 \cdot 3^3 = \underline{\quad}$$

$$X^A \cdot X^B = \underline{\quad}$$

$$2^3 \cdot 3^4 \cdot 2^5 = \underline{\quad}$$

$$2^5 \div 2^3 = \underline{\quad}$$

$$\frac{X^A}{X^B} = \underline{\quad}$$

$$3^2 \div 3^5 = \underline{\quad}$$

ALG I - Ch. 18 PRACTICE

① $2^3 \cdot 2^6 = \underline{\hspace{2cm}}$ ② $2^8 \div 2^6 = \underline{\hspace{2cm}}$

③ $9^x \cdot 9^y \cdot 9^z = \underline{\hspace{2cm}}$ ④ $5^3 \cdot 5 \cdot 5^2 = \underline{\hspace{2cm}}$

⑤ $3^2 \cdot 3^3 \cdot 3^4 \cdot 2^6 = \underline{\hspace{2cm}}$ ⑥ $3^2 \div 3^4 = \underline{\hspace{2cm}}$

⑦ $y^{2x} \cdot y^{3x} = \underline{\hspace{2cm}}$ ⑧ $2x^4 \cdot 3x^5 = \underline{\hspace{2cm}}$

⑨ $\sqrt{625} = \underline{\hspace{2cm}}$ ⑩ $-\sqrt{81} = \underline{\hspace{2cm}}$

DEFINE PARALLEL LINES _____

DEFINE PERPENDICULAR LINES _____

LESSON PRACTICE

Simplify each expression.

1. $15^2 =$

2. $\sqrt{169} =$

3. $(-8)^2 =$

4. $-\sqrt{100} =$

5. $16^2 =$

6. $\sqrt{144} =$

7. $4^5 \cdot 4^2 =$

8. $8^4 \cdot 8^7 =$

9. $8^7 \div 8^3 =$

10. $3^8 \cdot 3^4 =$

11. $B^2 B^3 B^5 =$

12. $C^1 D^5 D^4 C^3 D^2 =$

13. $8^X \cdot 8^Y =$

14. $M^{10X} \div M^{3X} =$

15. $8^9 \cdot 8^{10} \div 8^3 =$

16. $X^{5Y} \div X^{2Y} =$