

## HONORS LESSON

Find the factors and check by multiplying.

1.  $X^2 - 1 =$

2.  $X^2 - 36 =$

3.  $Y^2 - 16 =$

4.  $A^2 - B^2 =$

5.  $A^2 - 49 =$

6.  $B^2 - 25 =$

7.  $Y^2 - X^2 =$

8.  $X^2 - 4 =$

9.  $A^2 - 144 =$

10.  $4X^2 - 4Y^2 =$

11.  $B^2 - 64 =$

12.  $X^2 - 81 =$

13. 
$$\begin{array}{r} 57 \\ \times 53 \\ \hline \end{array}$$

14.  $75^2 =$

15. 
$$\begin{array}{r} 35 \\ \times 35 \\ \hline \end{array}$$

16. 
$$\begin{array}{r} 96 \\ \times 94 \\ \hline \end{array}$$

## SYSTEMATIC REVIEW

Find the factors.

1.  $x^2 - 16 =$

2. Check #1 by multiplication.

3.  $x^2 - 36 =$

4. Check #3 by multiplication.

Find the missing factor.

5.  $x - 1 \overline{) 2x^2 + 3x + 5}$

6. Check #5 by multiplication.

Find the square root.

7.  $\sqrt{4x^2} =$

8. Check #7 by substituting 10 for X, then multiplying to find the product.

Solve using Oriental Squares.

9.  $45^2 =$

10. 
$$\begin{array}{r} 37 \\ \times 33 \\ \hline \end{array}$$

11. Find the factors.  $X^2 - 18X + 77$ . 12. Check #11 by multiplication.

13.  $(2^5)^5 =$

14. What is the slope of  $2Y - 3X + 6 = 0$ ?

15. What is the point  $(0, 0)$  on a graph called?

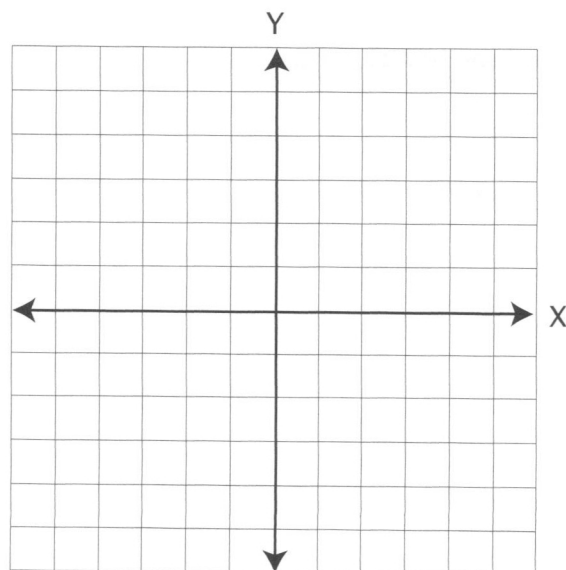
16. Distribute and fill in the blanks:  
 $(D + 2)(X + 3) = D(X + 3) + 2(X + 3) = \underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad}$ .

17. If the federal debt of the U.S. is five trillion dollars, and there are 300 million people, and each person gave \$1,000, would that be enough to pay the debt?

18. Solve for X and Y using elimination:  
 $24Y + 12X = 36$  and  $5Y - 5X = 10$ .

19. Graph  $3Y \leq 2X + 6$ .

20. Will the point  $(-3, -4)$  satisfy the inequality in #19?  $R \neq 0$



## SYSTEMATIC REVIEW

Find the factors.

1.  $X^2 - 4 =$

2. Check #1 by multiplication.

3.  $X^2 - 25 =$

4. Check #3 by multiplication.

Find the missing factor.

5.  $X + 2 \sqrt{2X^2 + 7X + 6}$

6. Check #5 by multiplication.

Find the square root.

7.  $\sqrt{X^2 + 10X + 25} =$

8. Check #7 by substituting 10 for X, then multiplying to find the product.

Solve using Oriental Squares.

9.  $65^2 =$

10. 
$$\begin{array}{r} 78 \\ \times 72 \\ \hline \end{array}$$

11. Find the factors of  $X^2 + 3X - 4$ .      12. Check #11 by multiplication.

13.  $(49)^3 = 7^?$

14. What is the slope of  $4Y + 8X + 2 = 0$ ?

15. Distribute and fill in the blanks:

$$(A + B)(C + D + E) = A( \quad + \quad ) + B( \quad + \quad ) =$$

$$\underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad}$$

16. If the federal debt of the U.S. is five trillion dollars, and there are 300 million people, and each person gave \$10,000, would that be enough to pay the debt?

FOR #17-18:

Fill in the table for all the possible whole number options for walking rate and time if the distance is 20 miles.

Rate	Time
20 mph	_____
10 mph	_____
_____	4 hr
4 mph	_____
_____	20 hr

FOR #19-20:

Fill in the table for all the possible whole number options for walking rate and time if the distance is 12 miles.

Rate	Time
12 mph	_____
_____	2 hr
4 mph	_____
3 mph	_____
_____	6 hr
_____	12 hr