NAME_____**DATE**_____**PER.**_____

FACTORING POLYNOMIALS – Day 1

Factor each polynomial. Look for GCF first!

1. $x^2 + 7x + 12 =$	2. $4x^2 + 56x + 160 =$
3. $x^2 + 5x – 24 =$	4. $x^2 – 16x + 48 =$
5. $x^2 – 2x – 35 =$	6. $2x^2 + 8x – 42 =$
7. $x^2 + 9x – 52 =$	8. $x^2 + 11x – 42 =$
9. $3x^2 + 21x + 30 =$	10. $3x^2 – 12x – 36 =$

11. $2x^2 - 2x - 40 =$	12. $2x^2 + 16x + 30 =$
13. $4x^2 + 48x + 128 =$	14. $x^2 - 10x + 21 =$

Answer the following. Show all work.

_____15. Which of the following shows $3x^2 - 19x + 6$ in factored form?

A. $(3x + 1)(x + 6)$
B. $(3x - 1)(x - 6)$
C. $(3x + 1)(x - 6)$
D. $(3x - 1)(x + 6)$

_____16. The Math Club sold concessions at a football game. They used 300 hamburger buns and made $1000. If the hamburgers sold for $3 each and cheese burgers for $3.50 each, which is a reasonable solution for the number of hamburgers sold?

A. 50
B. 100
C. 200
D. 300

_____17. What is the slope of the line whose equation is $5(2x - 3) = -8y + 2$?

A. $\frac{7}{8}$
C. $-\frac{7}{8}$
B. $\frac{5}{4}$
D. $-\frac{5}{4}$