

Geometry S/T Algebra REVIEW  
Covering SM 1 to 8

Name \_\_\_\_\_  
Period \_\_\_\_\_ Date \_\_\_\_\_

NO CALCULATORS - YOU MUST SHOW ALL WORK ON THIS SHEET

For #1-4, solve.

1.  $3x - 4 = 5(x - 4)$

2.  $\frac{y}{y+3} = \frac{4}{7}$

3.  $x = 2y - 11$   
 $8 = y - x$

4.  $2x - 3y = 7$   
 $3x + 5y = -18$

For #5-6, simplify.

5.  $\sqrt{\frac{49}{121}}$

6.  $\sqrt{432}$

For # 7-8, solve.

7.  $2x^2 - 5x = 12$

8.  $x^2 - 6x - 8 = 2$

For #9-16, simplify.

9.  $(3xy^3)(5x^3y^2)^2$

10.  $\frac{(3ab^3)^2}{(6a^4b)(-2ab)^3}$

11.  $5x - (3x - 4)$

12.  $(r + 5)(r^2 + 4r - 6)$

13.  $\frac{x+3}{2x-5} \cdot \frac{2x^2-11x+15}{2x^2-3x-9}$

14.  $\frac{n+5}{4n^2-9} \div \frac{n^2+2n-15}{2n-3}$

15.  $\frac{5x+4}{3} - \frac{2x+7}{3}$

16.  $\frac{3t}{5t-10} + \frac{4t-3}{t-2}$

17. Factor:  $2x^2 + 5x - 3$