Name:_____ Period:_____

Score:
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Unit 1 Review – Secondary 1 HONORS

Simplify.

1. $8-2\cdot5-3+5\cdot4$

2. $2-3\cdot6$

3. $44\div11+5\cdot7-5^2$

4. $4\cdot9-8+3$

5. $5^3-(-8)-12(-2)$

6. $15-6\div2$

7. $\dfrac{-23-(-15)}{(-18+7)-(-5)}$

8. $\dfrac{(-2)^2-3^2}{8-3(2)}$

Simplify.

9. $(4x^3-5x^2+7x)+(2x^2-x+3)$

10. $(-5y^2+4y^7)+(9y^7-4y^2)$

11. $\frac{1}{4}(8x^2+24)-(5x+6)$

12. $(x+5)(x+2)$

13. $(x-7)(x+3)$

14. $(2x+5)-(3x^2-4x+2)$

15. $(2x+9)(4x-3)$

16. $(6x-1)(5x+8)$

Simplify.

17. $-9(x-7)$

18. $8y^2(-6y^2+5y+1)$

19. $(4x^3y^2)^3$

20. $(6x^5y^2)(3xy^3)$

Solve for *y*. Then write your answer in slope-intercept form. $(y=mx+b)$

21. $2x+3y=9$

22. $4x-8y=12$

23. $x-y=5$

24. $4x-y=3$

25. $2y-3x=y+7$

26. $3x-\frac{y}{5}=-8$

27. $7y-4=-2y+x$

28. $\frac{2x}{4}-5y=-2$

Solve using inverse operations. Be sure to JUSTIFY your steps using Properties of Equality.

29.

$-5h = 35$	Justification

30.

$-18 = x - 5$	Justification

31.

$26 - m = 11$	Justification

32.

$15d - 6 = 18 + 7d$	Justification

Solve using inverse operations. Be sure to JUSTIFY your steps using Properties of Inequality.

33.

$4(5x - 6) > -24$	Justification

34.

$\frac{k}{5} \leq 11$	Justification

Solve using inverse operations.

35. $-3(2x - 9) = 2 - 5(3x + 7)$

36. $12x - 16x = 27$

Solve using inverse operations.

37. $2(15x-10)-4(16x+10)=8$

38. $5(2x+3)+6x=-17$

39. $20-5x\geq 17-2x$

40. $4(z-3)+3(2z+5)<-7$

41. $-9t+4(t-2)\leq t-(6+5t)+9$

42. $\frac{3}{5}m+2>\frac{1}{3}m$

43. Jan noticed at the store that a sweater costs \$3.95 more than a shirt. She bought 3 shirts and 2 sweaters and the total cost (before tax) was \$71.65. What is the price of a sweater? What is the price of a shirt?

44. Luigi purchased three pairs of shoes and two pairs of boots for \$130. If a pair of boots is five dollars less than the price of shoes, determine the price of a pair of boots.

45. Your mom spent \$48.75 (before tax) buying school supplies for the family: 5 rulers, 6 scissors, and 4 packs of colored pencils. Scissors cost twice as much as a ruler and colored pencils cost \$3 more than a ruler. How much does a ruler cost? How much does a pair of scissors cost? How much does a pack of pencils cost?

Solve for *c*.

46. $cx + by = d$

47. $\frac{1}{3}ct = p$

Solve for *m*.

48. $hm + y = w$

49. $u(m + e) = v$

Solve for *x*.

50. $3axb = 24$

51. $\frac{3}{5}(x + y) = 15$