

* Homework for Thursday 12/10

Algebra Study Guide Name: Key

Simplify each expression.

1. $9(x-6)$ $9x-54$

2. $20+8d$ $4(5+2d)$

3. $30p+5-14p+8$ $16p+13$

4. $4(5+6k)$ $20+24k$

5. $15+5d$ $5(3+1d)$ or $5(3+d)$

6. $4x+5(x+6)$ $4x+5x+30$
 $(9x+30)$

7. $7(5m-6)$ $35m-42$

8. $4(6m-5)$ $24m-20$

9. $17x+9-5x-7$ $12x+2$

10. $8(6+y)$ $48+8y$

11. $12m+9j-10m-7j+3m$ $5m+2j$

12. $16k+2(4+5k)-10k$ \longrightarrow $16k+8+10k-10k$

13. $8m+3m+12+2m-8-8m$ \longleftarrow
 $(16k+8)$

14. $6y^2+y+y+13$ $5m+4$
 \longleftarrow $6y^2+2y+13$

15. $r+r+9r-2$
 $11r-2$

(1)

Identify the expression that is NOT equivalent to the one given.

16. $16y + 20$

- A. $4(4y + 5)$ B. $36y$ C. $20y + 9 - 4y + 11$ D. $5y + 28 - 8 + 7y + 4y$

17. $30 - 24w$

- A. $5(6 - 6w)$ B. $15 + 45w + 15 - 21w$ C. $6(5 - 4w)$ D. $15(2 - 9w)$

Write an algebraic expression for each verbal phrase.

18. The cost of 2 cookies^c and a \$1.50 soda⁺

$$\underline{2c + \$1.50}$$

19. Three times^x as many cats^c as Mark

$$\underline{3 \times c} \quad (3c)$$

20. take⁻ away 60 from a number z

$$\underline{z - 60}$$

21. 3 plus⁺ a number j

$$\underline{3 + j}$$

22. a number p decreased⁻ by 100

$$\underline{p - 100}$$

23. product^x of 50 and a number b

$$\underline{50 \times b} \quad (50b)$$

24. 49 divided[÷] by a number z

$$\underline{49 \div z} \quad \frac{49}{z}$$

25. 3 less⁻ than a number p

$$\underline{p - 3}$$

(2)