Chapter 3 Review 1 Name_____
Show all work Period____ Date_____

1. Evaluate: $\frac{-3y}{4}$ *when* $y=-8$ and $\frac{4a^2}{d}$ *when* $a=-4$ *and* $d=-8$

Numbers 2 to 4: Solve the following equations using balancing; then check your solutions.

2. $\frac{c}{-8}=-16$ check **3.** $3=y+17$ check **4.** $-4x=-24$ check

5. Find the average of the following heights above and below sea level.
-6 *ft*., 7 *ft*., -9 *ft*., 3 *ft*., -12 *ft*., 0 *ft*., 8 *ft*., -7 *ft*.

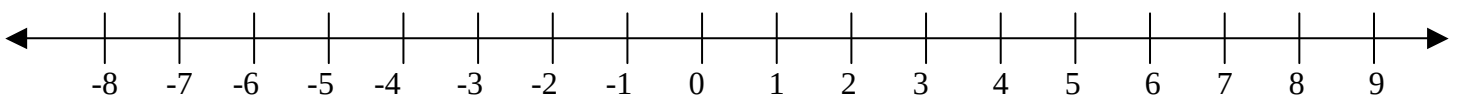
Numbers 6 and 7: Simplify, if possible. Then evaluate the expression for the given value(s).

6. $-12a+4a-20$ *for* $a=-4$ **7.** $|8-b|$ *for* $b=12$ *and* $b=-12$

8. Order the following integers from least to greatest: $14, -16, -8, 12, 8, 2, -7, 0$

9. Your stock went down \$30, then up \$55, then up again \$2, then down \$44, then up \$4. Have you lost or gained money at the end of the above cycle? How much did you gain or lose?

10. Use the number line to add: $-3+(^-2)-(^+1)+8$



Numbers 11 and 12: Simplify.

11. $-5\left[-2^4+3(-8)\right]$ **12.** $-7\left(9x^3-6x^2-5x+12\right)$

Numbers 13 to 20: Find the sums, differences, products, and/or quotients.

13. $17-(^{+}14)$ $-13+(-30)$

14. $15(-9)$

15. $\dfrac{-75}{15}$

16.

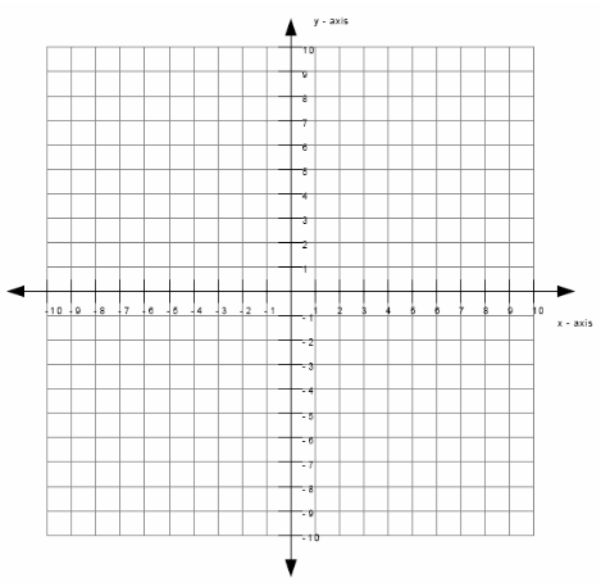
17. $-17+(-25)-(-13)$

18. $-3^2(-3)^2(8^0)$

19. $(3)(-4)(-2)(-1)(2)$

20. $\dfrac{9(-4)}{-3(-2)}$

21. Plot the following ordered pair:
$(-7,-4)$ $(-7,\ 6)$ $(5,\ 6)$ $(5,-4)$
Connect the dots to form a rectangle.

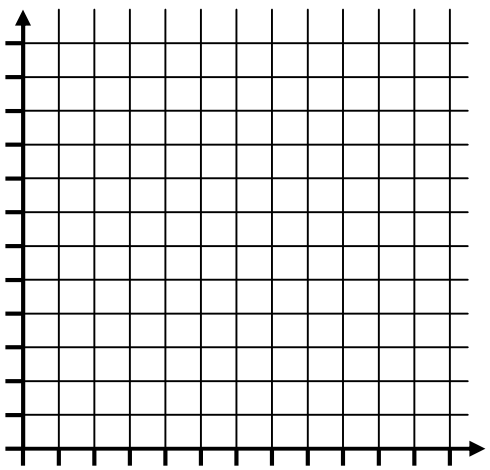


22. Find the perimeter of the rectangle.

23. Find the area of the rectangle.

24. **Graph these data** of the age of cars and the price of cars as a scatter plot. Put the price of cars on the y-axis.

Age	Price
3	$5000
4	$4000
5	$9000
2	$7000
3	$6000
2	$9000
3	$4000



25. What is the correlation?

26. **Translate the following sentence into an equation and solve the equation.**
Four times the difference of a number is the same as -44. Find the number.