Name_____ Date_____

1.1 Practice A

Find the absolute value.

1. $|-7|$
2. $|12|$
3. $|-13|$
4. $|0|$

Copy and complete the statement using <, >, or =.

5. $|-4|$ ___?___ 2
6. 7 ___?___ $|-7|$
7. $|8|$ ___?___ 5

8. While playing a game, you move back 5 spaces with your roll of the number cube. Your friend moves forward 3 spaces. Write each amount as an integer.

Order the values from least to greatest.

9. $-1, |5|, |4|, 8, |-1|$
10. $|2|, 0, |5|, 6, |3|$

Simplify the expression.

11. $|-19|$
12. $-|-8|$
13. $-|13|$

14. You are kite sailing on the ocean. The table gives your height at different times.

Time (seconds)	0	1	2	3
Height (feet)	2	4	6	8

   a. How many feet do you move each second?

   b. What is your speed? Give the units.

   c. Is your velocity positive or negative?

   d. What is your velocity? Give the units.

15. Use a number line.

   a. Graph and label the following points on a number line: $T = 1$, $L = -8$, $E = 4$, $A = -5$. What word do the letters spell?

   b. Graph and label the absolute value of each point in part (a). What word do the letters spell now?

16. Write an integer whose absolute value is greater than itself.

Name _____ Date _____

1.2 Practice A

Add.

1. $8 + 2$ **2.** $-5 + (-3)$ **3.** $-9 + (-3)$ **4.** $6 + (-6)$

5. $4 + (-4)$ **6.** $9 + (-6)$ **7.** $5 + (-2)$ **8.** $7 + (-13)$

9. $-18 + 1$ **10.** $-12 + (-5)$ **11.** $0 + (-7)$ **12.** $12 + (-15)$

13. Your bank account has a balance of $-\$21$. You deposit $\$50$. What is your new balance?

Tell how the Commutative and Associative Properties of Addition can help you find the sum mentally. Then find the sum.

14. $8 + (-5) + (-8)$ **15.** $-4 + 9 + 4$ **16.** $-5 + 12 + (-7)$

Add.

17. $7 + 5 + (-2)$ **18.** $-13 + 7 + (-3)$ **19.** $17 + (-5) + (-1)$

20. $4 + 8 + (-8)$ **21.** $-12 + (-4) + 9$ **22.** $-10 + 10 + (-3)$

23. $(-11) + 5 + (-12)$ **24.** $7 + 15 + (-7)$ **25.** $-12 + (-5) + (-10)$

Use mental math to solve the equation.

26. $n + (-8) = 5$ **27.** $4 + c = 0$ **28.** $-6 + k = -14$

29. In golf, a golfer must have a score of 0 in order to be at par. A golfer scores 2 above par on the first hole, 1 below par on the second hole, and 2 below par on the third hole. Which expression can be used to decide whether the golfer is at par after the first three holes?

$(-2) + 1 + 2$ $2 + (-1) + 2$ $2 + (-1) + (-2)$

30. Copy and complete the magic square so that each row and column has a magic sum of 0. Use each integer from -4 to 4 exactly once.

3		-2
		2

Name_____ Date_____

1.3 Practice A

Subtract.

1. $3 - 8$ **2.** $4 - (-5)$ **3.** $-6 - 4$ **4.** $-9 - (-6)$

5. $10 - (-9)$ **6.** $12 - 4$ **7.** $-15 - 7$ **8.** $-6 - (-14)$

9. $-1 - (-3)$ **10.** $15 - (-7)$ **11.** $20 - (-10)$ **12.** $-31 - 14$

13. You are scuba diving at -8 feet. You dive 5 feet deeper. What is your position in the water?

14. Write $7 - 3$ using addition.

15. Write $5 + (-3)$ using subtraction.

Evaluate the expression.

16. $8 - 12 - (-6)$ **17.** $8 - (-8) - 3$ **18.** $0 - (-4) - 8$

19. $9 - (-4) + 1$ **20.** $7 - 12 - (-4)$ **21.** $-11 - (-8) - (-3)$

22. $-14 - 6 - (-2)$ **23.** $8 + 0 - (-11)$ **24.** $8 + 13 - (-5)$

Use mental math to solve the equation.

25. $a - 7 = 3$ **26.** $b - (-8) = -3$ **27.** $6 - c = 10$

28. Write two different pairs of negative integers, x and y, that make the statement $x - y = 2$ true.

29. The table shows the highest and lowest elevations for two cities.

City	Highest elevation (feet)	Lowest elevation (feet)
Long Beach, CA	360	–7
New Orleans, LA	25	–8

a. Find the range of elevations for Long Beach.

b. Find the range of elevations for New Orleans.

c. One of the cities has an average elevation of about 2 feet below sea level. Which city is it?

Name_____ Date_____

1.4 Practice A

Multiply.

1. $4 \cdot (-3)$ **2.** $-6 \cdot 5$ **3.** $-8(-2)$ **4.** $9 \cdot 6$

5. $0 \cdot (-7)$ **6.** $-12(-3)$ **7.** $11 \cdot 7$ **8.** $5(-5)$

9. $-13 \cdot 7$ **10.** $-1 \cdot 9$ **11.** $2(-12)$ **12.** $-9 \cdot (-9)$

13. A water tank leaks 5 gallons of water each day. What integer represents the change in the number of gallons of water in the tank after 7 days?

Multiply.

14. $2 \cdot (-3) \cdot 5$ **15.** $-5(-4)(-1)$ **16.** $7 \cdot 2 \cdot (-3)$

17. $0 \cdot (-8) \cdot 6$ **18.** $-6 \cdot 4 \cdot (-2)$ **19.** $5(-4)(-5)$

Evaluate the expression.

20. $(-3)^2$ **21.** -3^2 **22.** $(-2)^3$

23. -5^2 **24.** $-3 \cdot (-4)^2$ **25.** $(-7)^2 \cdot 2$

26. $|-3| \cdot (-6)$ **27.** $-5(-2) - 3(-4)$ **28.** $2 \cdot (-3)^2 - 5^2$

Find the next two numbers in the pattern.

29. $6, -12, 24, -48, \ldots$ **30.** $9, -27, 81, -243, \ldots$

31. An elevator is 180 feet above the first floor. Each second it descends 12 feet.

a. What integer is the change in the height of the elevator each second?

b. Copy and complete the table.

Time	3 sec	6 sec	9 sec
Height			

c. Estimate how many seconds it takes the elevator to get to the first floor. Explain your reasoning.

d. From the first floor, it takes 4 seconds to reach the basement floor. What is the height of the basement floor with respect to the first floor?

Name_____ Date_____

1.5 Practice A

Divide, if possible.

1. $8 \div (-4)$ **2.** $-15 \div (-3)$ **3.** $\frac{-10}{5}$ **4.** $0 \div (-7)$

5. $-35 \div 7$ **6.** $\frac{18}{-6}$ **7.** $-72 \div 9$ **8.** $-5 \div 5$

9. $\frac{15}{0}$ **10.** $12 \div (-2)$ **11.** $\frac{-56}{-8}$ **12.** $21 \div (-3)$

13. Your team dives for 28 lobsters over 7 days. What is the average daily lobster catch?

Find the mean of the integers.

14. $5, -7, 12, -10, 15$ **15.** $-16, -27, 21, -19, 14, -3$

Evaluate the expression.

16. $6 - 12 \div (-3)$ **17.** $|-16| \div (-2)^2 - 4^2$ **18.** $\frac{-10 + (-2)^3}{-3}$

Find the next two numbers in the pattern.

19. $-96, 48, -24, 12, \ldots$ **20.** $12{,}500, -2500, 500, -100, \ldots$

21. A skateboarder descends on a ramp from 172 feet to 67 feet in 15 seconds. What is the average change in height per second?

22. The velocity (in feet per second) of a bouncing ball was recorded every second. The table shows the velocity for each second.

Time (sec)	1	2	3	4	5
Velocity (ft/sec)	−15	−6	2	10	−11

a. What is the average velocity of the bouncing ball over the 5 seconds?

b. What is the highest recorded speed of the bouncing ball? Is the ball going up or down at this speed?

c. During the 5 second period, did the ball spend more time going up or going down? Explain your reasoning.

d. Between which two seconds did the ball change from going up to going down? Explain your reasoning.