

Homework Lesson #1- Number Sense

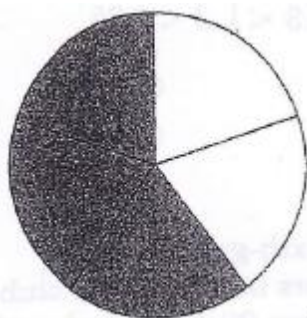
1. What is the prime factorization of 36?

- A. $2^2 \times 9$
- B. 4×3^2
- C. $2^2 \times 2^3$
- D. $2^2 \times 3^2$

2. Tanya is building a tower with blocks that are 3 inches high. Val is building a tower with blocks that are 7 inches high. What is the shortest tower each can build if they want their towers to be the same height?

- A. 14 inches
- B. 21 inches
- C. 35 inches
- D. 42 inches

3. What percent of the circle is not shaded?



- A. 20%
- B. 30%
- C. 40%
- D. 60%

4. Which number is a multiple of 16?

- A. 8
- B. 36
- C. 42
- D. 64

5. On Monday, 478 students bought lunch in the cafeteria. On Tuesday, 538 students bought lunch. What was the percent increase in the number of students buying lunch? Round to the nearest whole percent.

- A. 11%
- B. 13%
- C. 89%
- D. 113%

This table shows the noon temperature in six cities on one January day. Use the table to answer questions 6 and 7.

City	Temperature °F
Belford	3°
Fern	-12°
Ableton	10°
Caraway	-3°
Verdant	-8°
Valley Lo	6°

6. Which city had the greatest noon temperature?

- A. Belford
- B. Fern
- C. Ableton
- D. Valley Lo

7. Which city's noon temperature was greater than the temperature in Verdant, but less than the temperature in Belford?

- A. Caraway
- B. Valley Lo
- C. Fern
- D. Ableton

8. Which is equivalent to 5^3 ?

- A. $3 \times 3 \times 3$
- B. $3 \times 3 \times 3 \times 3 \times 3$
- C. 5×3
- D. $5 \times 5 \times 5$

9. Devin wants to buy a book that costs \$28.99. He has a coupon for 30% off the price of the book. If Devin uses his coupon, about how much money will he save?

- A. \$0.30
- B. \$1
- C. \$9
- D. \$21

10. Which shows all the factors of 45?

- A. 5, 9
- B. 3, 5, 9, 15
- C. 1, 3, 5, 9
- D. 1, 3, 5, 9, 15, 45

11. What number is represented by point A on the number line?



- A. $-\frac{3}{4}$
- B. -1.5
- C. $-\frac{5}{4}$
- D. -1.75

12. Pat is making flower bouquets. She has 12 roses, 21 daisies, and 45 carnations. All of the bouquets must be exactly alike. What is the greatest number of bouquets that Pat can make if she uses all the flowers?

- A. 3
- B. 4
- C. 5
- D. 7

13. Which number has a prime factor of 7?

- A. 3
- B. 5
- C. 10
- D. 35

14. Which is not equivalent to $2 \times 2 \times 2 \times 4 \times 4$?

- A. 128
- B. 2^7
- C. $2^3 \times 4^2$
- D. $2^4 \times 3^2$

15. Shonda, Liza, Dan, and Gary are each reading the same book for a class assignment. Shonda has read $\frac{2}{3}$ of the book, Liza has read 60% of the book, Dan has read $\frac{5}{12}$ of the book, and Gary has read 50% of the book. Who is closest to finishing the book?

- A. Shonda
- B. Liza
- C. Dan
- D. Gary

16. Which number will make the following statement false?

$$-0.\bar{3} < \square < 0.25$$

- A. -0.31
- B. 0.025
- C. $-\frac{1}{4}$
- D. 0.28

17. The ratio of sixth-graders to seventh graders in the science club is 4:7. If there are 20 sixth-graders, how many seventh-graders are in the club?

- A. 11
- B. 28
- C. 35
- D. 70

18. Choose the proportion that could be used to solve this problem.

In a survey of 65 students, 2 out of 5 ride bicycles to school. How many students ride bicycles?

- A. $\frac{2}{3} = \frac{65}{n}$
- B. $\frac{2}{3} = \frac{n}{65}$
- C. $\frac{2}{5} = \frac{65}{n}$
- D. $\frac{2}{5} = \frac{n}{65}$

19. One winter morning, the temperature was $-3^{\circ}F$. Jacob was not able to start his car until the temperature had risen 8 degrees. What was the temperature when Jacob finally started his car?

- A. $-5^{\circ}F$
- B. $5^{\circ}F$
- C. $-11^{\circ}F$
- D. $11^{\circ}F$

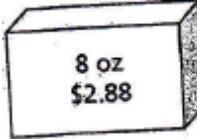
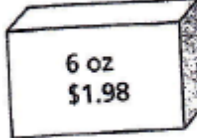
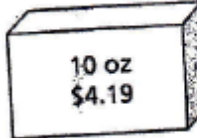
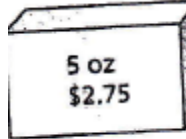
20. Betty sold two model airplanes. She packed the panes in boxes that weighed 0.85 pound and 1.4 pounds. What was the total weight of the two boxes?

- A. 0.99 lb
- B. 1.25 lb
- C. 2.25 lb
- D. 22.5 lb

21. Five friends shared $8\frac{1}{3}$ pounds of apples equally. How many pounds of apples did each person get?

- A. $1\frac{2}{3}$ pounds
- B. $1\frac{3}{5}$ pounds
- C. $13\frac{1}{3}$ pounds
- D. $41\frac{2}{3}$ pounds

22. Rachel paid \$0.36 per ounce for cheese. Which block of cheese did she buy?

- A. 
- B. 
- C. 
- D. 

23. It takes 9 meters of ribbon to make 24 bows. How many meters of ribbon does it take to make 16 bows?

- A. 4.5 m
- B. 6 m
- C. 13 m
- D. 42.7 m

24. Kim bought a pair of jeans for \$21.95. The following week, the jeans went on sale for \$15.88. By what percent did the price of the jeans decrease? Round your answer to the nearest whole percent.

- A. 6%
- B. 28%
- C. 38%
- D. 72%

25. Jared took a taxicab home from the bus station. The fare was \$18.50. He tipped the driver 20% of the fare. How much did Jared tip the driver?

- A. \$1.85
- B. \$2.00
- C. \$3.70
- D. \$37.00