

1. A ski club planned a trip to Sun Valley, and 56 of the members signed up. If 60% of the members did not sign up, how many members does the club have?
2. During the sale, the price of the video camera was marked down 26 percent. The sale price of the video camera was \$821. What was the original price of the video camera?
3. The experimental drug caused side effects in 16% of those who took it. If 768 experienced side effects, how many people took the experimental drug?
4. Damarian peeked around the bush and spied 700 griffins gathered in the glen. If this was 40 percent more than Leander spied under the tree, how many griffins did Leander spy?
5. The school being featured in a newspaper article caused the number of students enrolled to increase by 280 percent. If 290 students were enrolled before the article, how many were there after the article?
6. The cost of building a house increases 11 percent every year. If it costs \$89,000 to build a house this year, what would it cost to build a house next year?
7. Gretel peeked around the bush and spied 310 gnomes gathered in the glen. If this was 55 percent more than Konstantine spied under the tree, how many gnomes did Konstantine spy?
8. The number of bacteria increased by 325 percent overnight. If there were 20,000 bacteria yesterday, how many bacteria were present this morning?
9. A ski club planned a trip to Lake Tahoe, and 26 of the members signed up. If 90% of the members did not sign up, how many members does the club have?
10. The experimental treatment caused side effects in 15% of those who had it. If 795 experienced side effects, how many people had the experimental treatment?
11. The assessed value of a house increases 15 percent every year. If it is valued at \$95,000 this year, what would be the assessed value of the house next year?
12. The number of bacteria increased by 275 percent overnight. If there were 30,000 bacteria yesterday, how many bacteria were present this morning?
13. Add. Write the answer with all exponents positive. $x^{-1}y^2 + 5z^{-1}$

14. Add. Write the answer with all exponents positive. $x^{-1}y^2z^3 + wy^3z$
15. Add. Write the answer with all exponents positive. $xy^{-3} + 7z^{-3}$
16. Add. Write the answer with all exponents positive. $xy^2z^{-3} + w^{-3}y^2z^{-2}$
17. Represent the following numbers as being members of set M :
 $-1, -4, -4, -4, -1, -5, -2, -3, -5, 0, -2, 2, 1$
18. Given the sets $A = \{-2, 0, 3, 4\}$, $B = \{0, 4\}$, and $C = \{-2, -1, 0, 1\}$, tell which of the following statements are true and which are false.
- a) $4 \notin B$ b) $3 \in C$ c) $0 \notin A$ d) $-2 \in B$

Graph:

19. $3x - y = 6$
20. $4x - 3y = 12$

Simplify:

21. $\frac{\frac{1}{r+s}}{\frac{1}{t}}$

22. $\frac{\frac{c}{u}}{u+c}$

23. $\frac{q+r}{\frac{1}{s}}$

24. Simplify: $\frac{\frac{e}{y}}{\frac{z}{y+e}}$

25. Solve the system by the substitution method.

$$x = 2y + 3$$

$$3x + y = -54$$

26. Solve the system by the substitution method.

$$x = 6y + 4$$

$$9x + y = 91$$