
You should be able to answer these questions without the aid of a textbook in order to be taking a 100 level or above course.

1. Evaluate $3(-4) + 8 \cdot 2$.
2. Solve $6 - (w - 4) = 3w + 5$.
3. $-\frac{2}{3}x = 8$.
4. Bob has grades of 75 and 82 on his first two algebra tests. If he wants an average of *at least* 80 after his third test, what score must he achieve?
5. Graph the line $4x + y = 8$.
6. Simplify. Use only positive exponents. $\frac{(3xy^{-1})^3}{2^4x^{-2}y^2}$.
7. Simplify. $(9w^2 - 6w) - (4w^2 + 7w - 3)$.
8. Multiply. $(2p + 5)(3p - 8)$.
9. Factor. $m^2 - m - 56$.
10. Factor. $2t^2 - 5t + 2$.
11. Solve. $r^2 + 4r + 3 = 0$.
12. The length of a rug is 6 ft more than the width. The area is 40 ft^2 . Find the length and the width of the rug.
13. Add. $\frac{3}{m+1} + \frac{4}{m}$.
14. Solve. $\frac{3}{r+3} - \frac{2}{r-3} = \frac{-12}{r^2-9}$.
15. Find the equation of the line through $(2, -6)$ and $(1, 3)$.
16. Solve the following system of equations.

$$3x + y = 12$$

$$2x - y = 3$$

17. Simplify $-\left(\frac{36}{25}\right)^{-3/2}$.
18. Simplify $\sqrt[3]{54a^8b^5}$.
19. Solve $\sqrt{3m+1} - 2 = 1$.
20. Simplify the following imaginary number $\frac{3-i}{2+i}$.

21. Find an exact answer to $2x^2 - 3x - 1 = 0$.
22. Solve and graph the solution set to $2x^2 + 7x > 15$.
23. Solve $\log_8 64 = x$.
24. Solve $\log_8(x + 5) + \log_8(x - 2) = 1$.