

1. If $-(3/4)x = 1/2$ then what is x ?
2. Write two different equations with the same solutions as $3(y - 1) = 8$.
3. If $3 - x + x - x + x - x + x - x + x - x = 0$, then what is x ? _____
4. If $x^2y^3 = 2$ then what is $x^{10}y^{15}$? Give a numerical answer.
5. If $yz = 35.26$ and $y^2z = 303.236$ then what are y and z ? Hint: $y^2z = y \cdot (yz)$.
6.
$$\begin{array}{l} 3x + 2y + 2z = 19 \\ 3x + y + z = 14 \end{array}$$
 (College Board; 2009 CCRS) If these equations are true, which of the following is the value of $y + z$? **a.** -5 **b.** -4 **c.** 0 **d.** 5
7. Which of the following expressions is equivalent to $t^2 - 1$?
 $(t - 1)(1 + t)$ $(t + 1)(1 - t)$ $(t - 1)(1 - t)$ $(t + 1)(1 + t)$
8. Which of the following expressions is equivalent to $7 - 2(3 - 8x)$?
 $7 - 2(-5x)$ $7 - 6 + 16x$ $7 - 6 - 16x$ $5(3 - 8x)$
9. If $x \neq y$ and $x^2 - y^2 = 5(x - y)$ then what is $x + y$?
10. (2009 CCRS) If a bar of soap balances $3/4$ of a bar of soap and $3/4$ of a pound, how much does the bar of soap weigh?
11. One face of a cube has area x . What is the volume of the cube? Answer in terms of x .