

Assignment: T2-26 Expressions & Equations

1. Explain the difference between an expression and an equation and give an example of each.

Translate each phrase into an algebraic expression or equation.

2. A number more than 6 is 18 Expression OR Equation
3. 4 times the sum of a number and two Expression OR Equation
4. The quotient of 9 and a number squared Expression OR Equation
5. 9 is the difference of half a number and 7 Expression OR Equation
6. 8 less than a number Expression OR Equation
7. The cube of a number increased by 3 Expression OR Equation
8. The product of a number and -5 is 40 Expression OR Equation
9. Twice the sum of a number and 8 Expression OR Equation
10. 32 is a number decreased by 12 Expression OR Equation
11. A number to the 5th power divided by -4 Expression OR Equation

Decide if each problem is an equation or an expression. If it is an expression, simplify the expression. If it is an equation, solve the equation.

12. $\frac{1}{2}(x-10) = 6$

Expression
OR
Equation

13. $4x - 2(x-7)$

Expression
OR
Equation

14. $2x + 4.8 + 3x = 20.3$

Expression
OR
Equation

15. $7x + 8 = -3x - 12$

Expression
OR
Equation

16. $8 + 3(2x-5) + x$

Expression
OR
Equation

17. $\frac{1}{4}x + \frac{1}{2} - \frac{3}{4}x$

Expression
OR
Equation

18. $\frac{x+10}{3} = -2$

Expression
OR
Equation

19. $2x + 9 - 5x + 1$

Expression
OR
Equation

20. Two angles are complement. One of the angles is 30 more than twice the other angle. Find the measure of each angle.

21. A segment has a total length of 16 cm. One portion of the segment is 5 less than half the other portion. Find the length of each portion of the segment.