



SOLVING TWO-STEP EQUATIONS

1. If $\frac{1}{2}x - 40 = 223$, find the value of x .

2. If $21 = -3x + 6$, find the value of $2x + 5$.

Match each phrase with a corresponding variable expression.

_____ 7 less than a number

A. $2n + 7$

_____ A number decreased by 11

B. $4(n + 7)$

_____ 75% of a number

C. $7 + \frac{n}{8}$

_____ Ten times the difference of a number and 7

D. $n - 7$

_____ 7 more than twice a number

E. $n - 11$

_____ 7 plus the quotient of a number and 8

F. $n - .07n$

_____ Four times the sum of a number and 7

G. $10(n - 7)$

_____ A number decreased by 7%

H. $0.75n$

Write an equation for each situation, and then solve.

1) Six more than three times a number is negative thirty-six.

Equation: _____

2) Twelve is sixteen less than four percent of a number.

Equation: _____

3) A moving company charges \$1200 for the supplies needed to pack up a small house and an additional \$90 per hour to do the loading and moving. If the cost of moving is \$1740 how many hours did the moving company need to move the small house?

Equation: _____

4) Kate's English test grade was 37 points less than twice the grade on her Science test. If Kate made an 85 on her English test, write an equation that could be used to find s , the grade on her Science test. Then solve.

Equation: _____

5) Kimberly had a coupon for \$15 off the purchase of one item. She decided to buy a pair of jeans that was on sale for $\frac{2}{3}$ of their original price. After using the coupon Kimberly only paid \$10 for the pair of jeans. What was the original price of the jeans?

Equation: _____