

Name: _____

Basic Equations

with Addition, Subtraction, and Multiplication

Find the value of x . Show your work.

a. $3x = 7 + 14$

b. $40 + 22 + 10 = 9x$

c. $7 \cdot 8 = x - 4$

d. $x + 35 = 20 \cdot 2$

e. $12x = 6 \cdot 8$

f. $78 - 28 = 10x$

g. $23 + x = 16 \cdot 4$

h. $6x = 25 + 20 + 9$

i. $7x = 63 - 21$

j. $x + 12 = 9 \cdot 3$

★ **Challenge:**

The product of 7 and x is the same as the sum of nine and three and two. What is the value of x ?

ANSWER KEY

Balancing Basic Equations

Addition, Subtraction, and Multiplication

Find the value of x . Show your work.

a. $3x = 7 + 14$

$x = 7$

b. $40 + 22 + 10 = 9x$

$x = 8$

c. $7 \cdot 8 = x - 4$

$x = 60$

d. $x + 35 = 20 \cdot 2$

$x = 5$

e. $12x = 6 \cdot 8$

$x = 4$

f. $78 - 28 = 10x$

$x = 5$

g. $23 + x = 16 \cdot 4$

$x = 41$

h. $6x = 25 + 20 + 9$

$x = 9$

i. $7x = 63 - 21$

$x = 6$

j. $x + 12 = 9 \cdot 3$

$x = 15$

★ **Challenge:**

The product of 7 and x is the same as the sum of nine and three and two. What is the value of x ?

$x = 2$