MATH 0482
Chapter 1.7 Solving Linear Equations

SOLVE FOR X.

$3X - 5 = 16$

LINEAR EQUATION WITH 1 VARIABLE:

$ax + b = 0$

SOLUTION: ANY NUMBER REPLACING X TO MAKE A TRUE STATEMENT

ADDITION PROPERTY:

IF

$A = B$

THEN

$A = B$

SUBTRACTION PROPERTY:

IF

$A = B$

THEN

$A = B$

MULTIPLICATION PROPERTY:

IF

$A = B$

THEN

$A = B$

DIVISION PROPERTY:

IF

$A = B$

THEN

$A = B$

SOLVE: $7x - 2 = 19$.

Solve.

$56 = 8 + 12y$

$\frac{5}{3}x + 2 = -8$

$-4a + 2 - a = 1$

$-2y - 3 = 5y + 11$

$-\frac{1}{2}(10x - 2) + 3 = 7(1 - 2x)$

$5(3 - a) - 2(5 - 2a) = 3$

SOLVE.

$4(x+5)+6=2(2x+3)$

$3(3y+5)+5=10(y+2)-y$

$\frac{1}{3}x+\frac{1}{5}=\frac{1}{5}x-1$

WHEN 6 IS SUBTRACTED FROM TWICE THE SUM OF A NUMBER AND 8, THE RESULT IS 5. FIND THE NUMBER.

A RECTANGLE HAS A PERIMETER MEASURING 92 METERS. THE LENGTH IS 2 METERS LESS THAN 3 TIMES THE WIDTH. FIND THE RECTANGLE'S DIMENSIONS.

GIVEN A $4\frac{3}{8}\%$ ANNUAL INTEREST RATE, HOW LONG WILL IT TAKE $2500 TO YIELD $437.50 IN SIMPLE INTEREST?

$$I = prt$$

NANCY LYNN INVESTED A TOTAL OF $12500 INTO TWO ACCOUNTS EACH EARNING SIMPLE INTEREST. HER MUTUAL FUND ACCOUNT EARNED 7% AND HER CD EARNED 4.5%. IF HER TOTAL INTEREST WAS $670, HOW MUCH WAS IN EACH ACCOUNT?

$$I = prt$$