

Name :

Class :

SYSTEM OF LINEAR EQUATIONS IN TWO VARIABLES

Solving a System of Two Linear Equations in Two Variables by Substitution

Solve each system by substitution.

1) $y = -4x + 16$ (1)
 $-3x + 8y = 23$ (2)

Solution:

Put $y = -4x + 16$ in equation 2, we get

$$x = \boxed{}$$

and solving equation 1, we get

$$y = \boxed{}$$

Therefore $x = \boxed{}$ and $y = \boxed{}$

2) $-3x + 6y = -24$ (1)
 $y = 7x + 22$ (2)

Solution:

Put $y = 7x + 22$ in equation 1, we get

$$x = \boxed{}$$

and solving equation 2, we get

$$y = \boxed{}$$

Therefore $x = \boxed{}$ and $y = \boxed{}$

3) $y = 5x + 5$ (1)
 $y = x + 5$ (2)

Solution:

Put $y = x + 5$ in equation 1, we get

$$x = \boxed{}$$

and solving equation 2, we get

$$y = \boxed{}$$

Therefore $x = \boxed{}$ and $y = \boxed{}$

4) $y = 4x + 22$ (1)
 $y = -4x - 18$ (2)

Solution:

Put $y = 4x + 22$ in equation 2, we get

$$x = \boxed{}$$

and solving equation 1, we get

$$y = \boxed{}$$

Therefore $x = \boxed{}$ and $y = \boxed{}$