Simultaneous Equations
Elimination Method
Grade 11

The following questions have been solved incorrectly. Find the mistake in each question, make the corrections and find the correct solutions.

$12x - 6y = 12$
$10x + 6y = 32$

Subtracting

$2x = -20$

$\frac{2x}{2} = \frac{-20}{2}$

$x = -10$

Substitute x = -10 into equation 2

$10(-10) + 6y = 32$
$-100 + 6y = 32$
$6y = 32 + 100$
$6y = 132$
$\frac{6y}{6} = \frac{132}{6}$

$y = 22$

$x =$ _____ $y =$ _____

$3x + 2y = 14$
$4x + 2y = 16$

Subtracting

$x = -2$

Substitute x = -2 into equation 1

$3(-2) + 2y = 14$
$-6 + 2y = 14$
$2y = 14 + 6$
$2y = 20$
$\frac{2y}{2} = \frac{20}{2}$

$y = 10$

$x =$ _____ $y =$ _____