22 Which system of equations will yield the same solution as the system below?

$$x - y = 3$$
$$2x - 3y = -1$$

(1) $-2x - 2y = -6$
$2x - 3y = -1$

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

(3) $2x - 2y = 6$
$2x - 3y = -1$

(4) $3x + 3y = 9$
$2x - 3y = -1$

21 Which pair of equations could *not* be used to solve the following equations for x and y?

$$4x + 2y = 22$$
$$-2x + 2y = -8$$

(1) $4x + 2y = 22$
$2x - 2y = 8$

(2) $4x + 2y = 22$
$-4x + 4y = -16$

(3) $12x + 6y = 66$
$6x - 6y = 24$

(4) $8x + 4y = 44$
$-8x + 8y = -8$

22 A system of equations is given below.

$$x + 2y = 5$$
$$2x + y = 4$$

Which system of equations does *not* have the same solution?

(1) $3x + 6y = 15$
$2x + y = 4$

(2) $4x + 8y = 20$
$2x + y = 4$

(3) $x + 2y = 5$
$6x + 3y = 12$

(4) $x + 2y = 5$
$4x + 2y = 12$

22 Using the substitution method, Vito is solving the following system of equations algebraically:

$$y + 3x = -4$$
$$2x - 3y = -21$$

Which equivalent equation could Vito use?

(1) $2(-3x - 4) + 3x = -21$

(2) $2(3x - 4) + 3x = -21$

(3) $2x - 3(-3x - 4) = -21$

(4) $2x - 3(3x - 4) = -21$

10 Last week, a candle store received $355.60 for selling 20 candles. Small candles sell for $10.98 and large candles sell for $27.98. How many large candles did the store sell?

(1) 6

(2) 8

(3) 10

(4) 12

Answer Key:

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