PRINTABLE VERSION

Quiz 4

Question 1

Solve the system for x:

$$12\,x + 6\,y = 60$$
$$x + y = 5$$

a) ○ -3

b) ○ 6

c) ○ 3

d) ○ -5

e) ○ 5

f) ○ None of the above.

Question 2

Solve the system for y:

$$x - y = 6$$
$$2\,x + 5\,y = -30$$

a) ○ 8

b) ○ -4

c) ○ 6

d) ○ -8

e) ○ -6

f) ○ None of the above.

Question 3

Two numbers have a sum of 16 and a difference of 4. Find the two numbers.

a) ○ $\{5, 11\}$

b) ○ $\{6, 10\}$

c) ○ $\{-6, 10\}$

d) ○ $\{4, 12\}$

e) ○ $\{-10, -6\}$

f) ○ None of the above.

Question 4

Paul has 12 coins in his pocket, consisting entirely of dimes and quarters. If he has a total of 240 cents in coins, how many coins of each type are in his pocket?

a) ○ 4 dimes and 8 quarters

b) ○ 7 dimes and 5 quarters

c) ○ 5 dimes and 7 quarters

d) ○ 8 dimes and 4 quarters

e) ○ 9 dimes and 3 quarters

f) ○ None of the above.

Question 5

Solve the following system:

$$-x + y = 4$$
$$x + 4\,y = -2$$

a) ○ No solution.

b) ○ $x = -\dfrac{19}{5}, \; y = \dfrac{6}{5}$

c) ○ $x = \dfrac{2}{5}, \; y = -\dfrac{13}{5}$

d) ○ $x = -\dfrac{14}{5}, \; y = \dfrac{1}{5}$

e) $\bigcirc$ $x = -\dfrac{18}{5},\ y = \dfrac{2}{5}$

f) $\bigcirc$ None of the above.

Question 6

Solve the following system:

$$-5\,x + y = -4$$
$$x - \dfrac{y}{5} = -3$$

a) $\bigcirc$ No solution.

b) $\bigcirc$ $x = -\dfrac{6}{11},\ y = -\dfrac{74}{11}$

c) $\bigcirc$ Infinitely many solutions.

d) $\bigcirc$ $x = -\dfrac{4}{11},\ y = -\dfrac{75}{11}$

e) $\bigcirc$ $x = -\dfrac{15}{11},\ y = -\dfrac{64}{11}$

f) $\bigcirc$ None of the above.

Question 7

Solve the following system:

$$-2\,x + 3\,y = 6$$
$$-6\,y + 4\,x = -12$$

a) $\bigcirc$ No solution.

b) $\bigcirc$ $x = 3,\ y = 4$

c) $\bigcirc$ Infinitely many solutions.

d) $\bigcirc$ $x = 5,\ y = 5$

e) $\bigcirc$ $x = 4,\ y = 4$

f) $\bigcirc$ None of the above.

Question 8

Solve for x the following system of equations:
$$x^2 - y = 0$$
$$x + y = 6$$

a) ○ $2, 1$

b) ○ $2, -1$

c) ○ $2, -3$

d) ○ $-2, 3$

e) ○ $-2, -1$

f) ○ None of the above

Question 9

Solve for y the following system of equations:
$$x^2 + y^2 = 51$$
$$x - 4y = 0$$

a) ○ $-\sqrt{3}, \sqrt{3}$

b) ○ $-4, 4$

c) ○ $-2, 2$

d) ○ 0

e) ○ $-3, 3$

f) ○ None of the above

Question 10

A rectangle has a perimeter of 44 centimeters and an area of 120 square centimeters. Find the dimensions of the rectangle.

a) ○ $4 \text{ cm} \times 30 \text{ cm}$

b) ○ $10 \text{ cm} \times 12 \text{ cm}$

c) ○ $1 \text{ cm} \times 120 \text{ cm}$

d) ○ $6 \text{ cm} \times 20 \text{ cm}$

e) ○ $3 \text{ cm} \times 40 \text{ cm}$

f) ○ None of the above