Linear Equations as a Matrix Equation - Independent Practice Worksheet

Complete all the problems.

Solve using augmented matrices.

1.
$$x + y = -3$$

$$x + 4y = -5$$

2.
$$2x + y = -1$$

3.
$$3x + 4y = -5$$

$$3y = -5$$

4.
$$x + y = -7$$

$$6x + 2y = -9$$

5.
$$x = -6$$

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

6. Conan runs a book shop. This morning he took two orders of books from his customers. The first order was for 3 books for grade 1 and 5 books for grade 3, at a cost of \$ 61. The second order was 1 book for grade 1 at a cost of \$ 7. How much do the books cost?

A book for grade 1 costs \$ _____, and the book for grade 3 costs \$ _____.

7. Mandy want to buy some watches for her relatives. She went to a watch shop and places two different orders for watches. The first order was for 3 kid's watches and 4 men's watch at a cost of \$ 200. The second order was for one kid's watch at the cost of \$ 20. How much do the orders cost?

1 kid's watch cost \$ _____, and 1 men's watch cost \$ _____.

Name	Date

8. Arlie wants to give some cell phones to his friends. He went to a shop he purchased 2 Apple iPhones and 6 Samsung smart phones at a cost of \$ 680. Next day he went to the shop and returned 1 Samsung smart phone to the shopkeeper at a cost of \$ 80. How much do the phones cost?

1 Apple iPhone costs \$ _____, and the Samsung smart phone costs \$ _____.

9. Bonny wants to buy jewelry for her wedding. She purchased 3 rings and 2 necklaces at a cost of \$ 255. Next day, she went to the shop and purchased one more ring for her mother at a cost of \$35. What is the cost of each piece?

Ring cost =\$_____, Necklace cost = \$____.

10. Candi told her father to get some notebooks and pencils. Her father went to the market and bought 6 notebooks and 12 pencils at a cost of \$30. She realizes that she needs one more notebook. She calls her father and he goes back. He buys the notebook for \$ 3. Now calculate the cost of per piece.

Notebook cost = _____, Pencil cost = _____