Algebra Foundations Quiz # 5 Week 3 Monday   Name_____

SHOW ALL WORK to receive full credit.
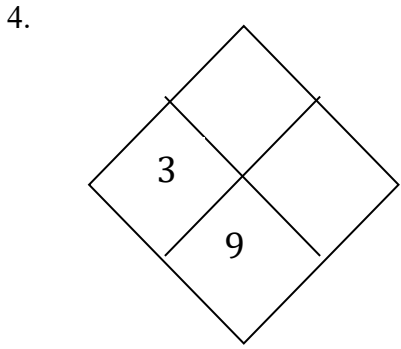
Complete the following Diamond Problems. (4 points each)

1.

6
6

2.

8
15

3.

21
3

4.

3
9

5.

35
7

6.

9
12

7.   **Mental Percents: Complete the following table.**
      (1 point for each column – 6 points for the table.)

#	100%	50%	25%	10%	5%	1%
240						
90						

**Answer the following questions using the chart above. (4 points each)**

8.   What is 55% of 240? _____

9.   What is 6% of 90? _____
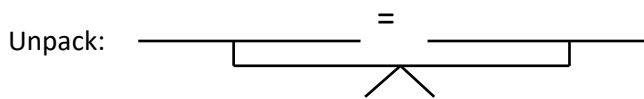
10.   What is 35% of 240? _____

Use the scales to solve the following Magician Problems. (4 points each)

11. On the left side of the scale, the magician placed three bags each with one cup and two coins along with three more cups. On the right side of the scale he placed two bags each with two cups and three coins along with 4 more coins. How many coins were in each cup?

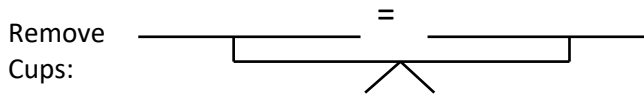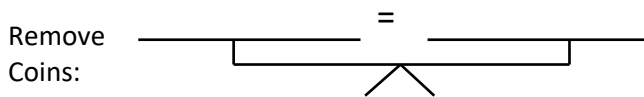**Write the algebraic equation below:**

Problem:

Unpack:

Simplify:
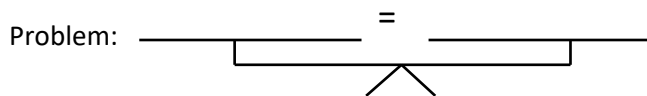
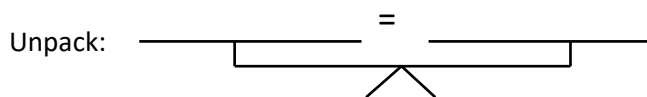Remove Cups:

Remove Coins:

_____

_____

_____

_____

_____
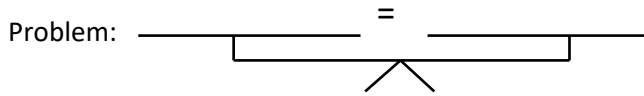
Answer: 1 cup = _____ coins

12. On the left side of the scale, the magician placed two bags each with two cups and one coin along with four more coins. On the right side of the scale he placed three bags each with one cup and three coins. How many coins were in each cup?
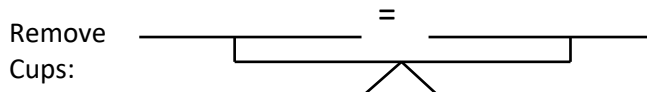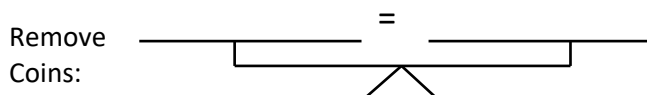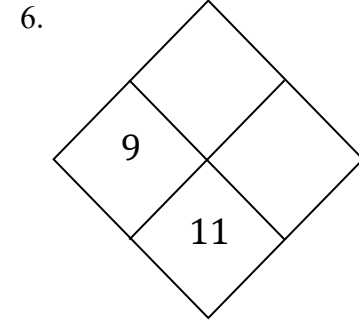
Write the algebraic equation below:

Problem: ──────── = ────────

_____

Unpack: ──────── = ────────

_____

Simplify:

_____

Remove
Cups: ──────── = ────────

_____

Remove
Coins: ──────── = ────────

_____

Answer: 1 cup = _____ coins

Algebra Foundations Quiz # 7   Week 3 Tuesday   Name_____

SHOW ALL WORK to receive full credit.

Complete the following Diamond Problems. (4 points each)

1.

14

7

2.

4

11

3.

64

8

4.

5

10

5.

72

9

6.

9

11
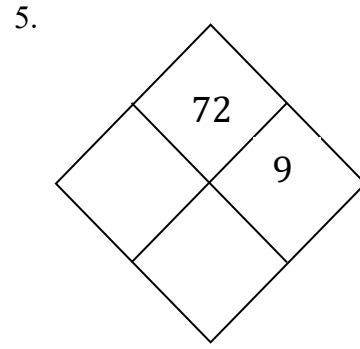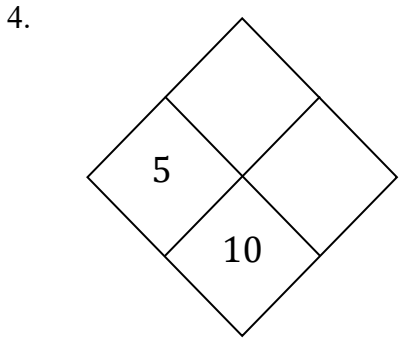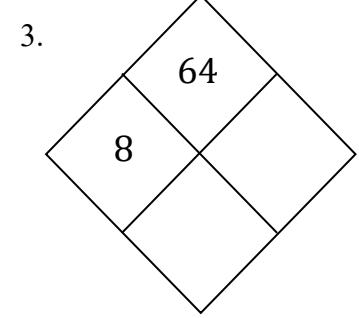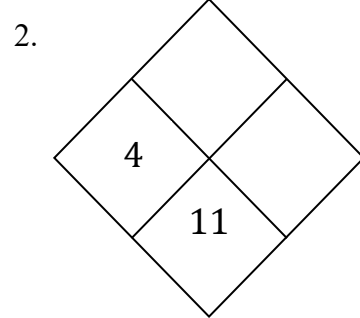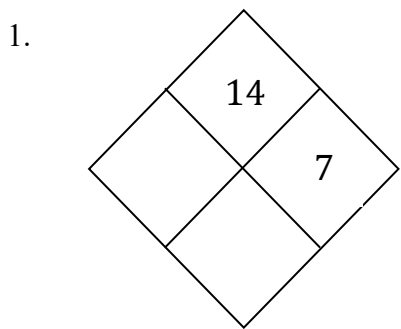
7. **Mental Percents: Complete the following table.**
    (1 point for each column – 6 points for the table.)

#	100%	50%	25%	10%	5%	1%
860						
42						

Answer the following questions using the chart above. (4 points each)

8.   What is 90% of 860? _____

9.   What is 20% of 42? _____

10.   What is 7% of 860? _____

Solve the following equations. (2 points each)

11. $9x = 36$

12. $5c = 35$

13. $2y + 7 = 11$

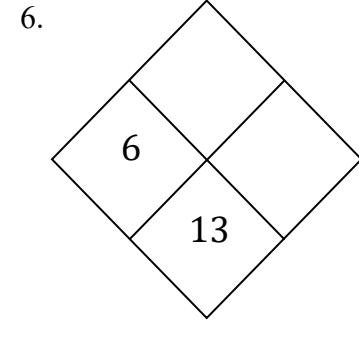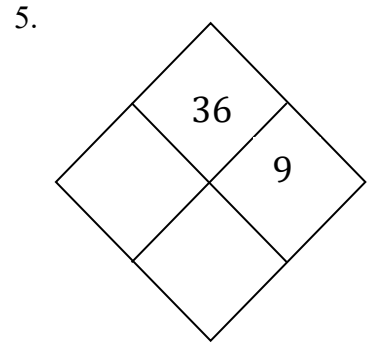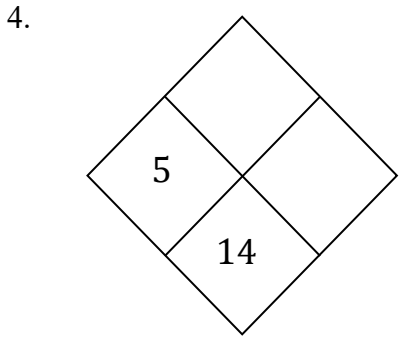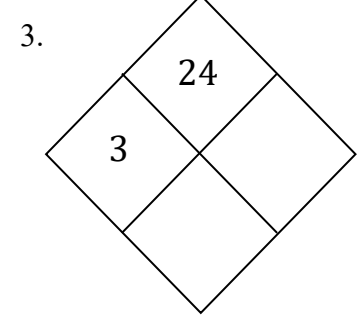14. $2(3c + 1) = 2(c + 5) + 4$

8 points

Algebra Foundations Quiz # 8   Week 3 Friday   Name_____

SHOW ALL WORK to receive full credit.

Complete the following Diamond Problems. (2 points each)
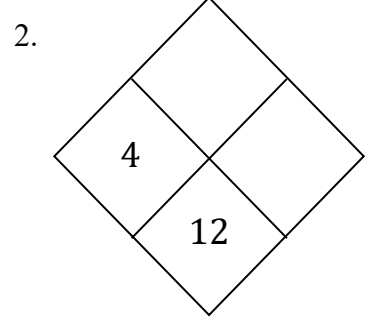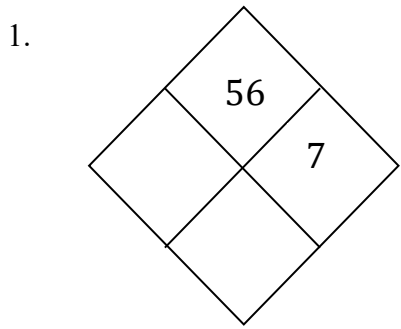
1.

56

7

2.

4

12

3.

24

3

4.

5

14

5.

36

9

6.

6

13

7.   **Mental Percents: Complete the following table**
       (1 point for each column – 6 points for the table.)

#	100%	50%	25%	10%	5%	1%
840						
68						

Answer the following questions using the chart above.   (2 points each)

8.   What is 80% of 840? _____

9.   What is 30% of 68? _____

10.   What is 35% of 840? _____

24 points

Solve the following equations.

11. $9x = 54$

12. $x + 8 = 13$

13. $5x = 45$

14. $16 = x + 9$

(3 points each)

15. $7x + 5 = 61$

16. $3x + 8 = 26$

17. $4(3c + 2) = 56$

18. $8c + 8 = 5c + 20$

19. $3(2c + 4) = 2(4c + 1)$

20. $2(3c + 4) + 3c = 4(c + 3) + 6$