

Name _____

1. Kiko and Grace volunteer at the community center. Kiko has already volunteered 25 hours. Grace has volunteered 15 hours. Each week, both volunteer another 10 hours.

- A. Complete the table to show the total hours each has volunteered after each week. Use the rule "add 10". **2 points**

Week	Kiko (x)	Grace (y)
Start	25	15
1	35	25
2	45	35
3	55	45
4	65	55

- B. Select all the ordered pairs that represent the hours Kiko and Grace have each volunteered. **1 point**

- (10, 10) (55, 45)
 (35, 25) (65, 55)
 (45, 55)

- C. Describe the relationship between the hours each person has volunteered after each week. **1 point**

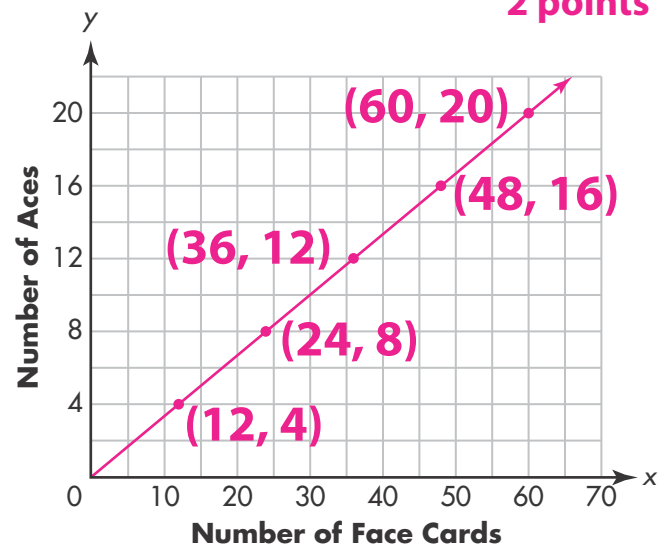
Sample answer: Grace's total number of hours is always 10 less than Kiko's total number of hours.

2. There are 12 face cards and 4 aces in a standard deck of cards.

- A. Complete the table to show how many face cards and aces in all are in different numbers of card decks. Use the rules "add 12" and "add 4". **2 points**

Decks	Face Cards	Aces
1	12	4
2	24	8
3	36	12
4	48	16
5	60	20

- B. Use the total number of face cards and aces to form ordered pairs. Graph and label the ordered pairs below. **2 points**



- C. What would the ordered pair (84, 28) represent? **1 point**

When there are 84 face cards, there are 28 aces.

3. Talia is selling magazine subscriptions and books to raise funds for a field trip. She has already earned \$10 selling magazines and \$7 selling books.

A. Talia earns \$3 for each magazine subscription and \$4 for each book. Each week, she sells one of each. Complete the table to show the amount she has raised after each week. Use the rules “add 3” and “add 4”.

Funds Raised (\$) 2 points

Week	Magazine Subscriptions	Books
Start	10	7
1	13	11
2	16	15
3	19	19
4	22	23

B. Will Talia ever raise more funds selling books than magazine subscriptions? If so, when? **2 points**

Yes, after 4 weeks

C. How does the table in A help you answer the question in B? **1 point**

**Sample answer:
Compare the corresponding terms in the number sequences.**

4. The Briggs Family Orchard delivers 8 crates of peaches and 24 crates of apples each day to local markets.

A. Complete the table to show how many crates of peaches and apples in all the orchard delivers after each day. Use the rules “add 8” and “add 24”.

2 points

Days	Crates of Peaches	Crates of Apples
1	8	24
2	16	48
3	24	72
4	32	96

B. Adrian says “the total number of crates of apples delivered is always 16 more than the total number of crates of peaches delivered.” Do you agree? Explain. **2 points**

**No; Sample explanation:
After Day 1, there are 16 more crates of apples than peaches. After Day 2, there are 32 more crates of apples. So, there are 16 more crates of apples delivered only after the first day.**

C. Sofia wants to graph this information. What ordered pair represents the total number of crates of each item delivered after 6 days? **1 point**

- (A) (40, 120) (C) (48, 144)
 (B) (48, 128) (D) (64, 144)