Solve each problem.

P   X

Maria   Oliver   Dave
Adam   Tiffany   Faye

Carol

Robin   Billy

Rachel
George

W

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. **Use Line**

8. **Use Line**

9. **Use Line**

10. **Use Line**

11. **Use Line**

12. **Use Line**

13. **Use Line**

1) How many people owned a Playstation?

2) How many people owned a Xbox?

3) How many people owned a WiiU?
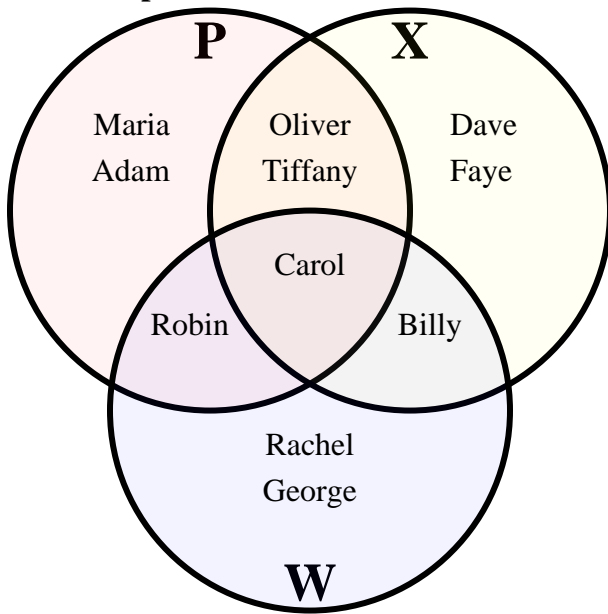
4) How many people owned ONLY a Playstation?

5) How many people owned ONLY a Xbox?

6) How many people owned ONLY a WiiU?

7) $X \cup P =$ _____

8) $X \cap P =$ _____

9) $W - X =$ _____

10) $(W \cap X) - P =$ _____

11) $(P \cup W) - X =$ _____

12) $X =$ _____

13) XWP = _____

1-10	92	85	77	69	62	54	46	38	31	23
11-13	15	8	0							

Solve each problem.

P   X

Maria   Oliver   Dave
Adam   Tiffany   Faye

Carol

Robin   Billy

Rachel
George

W

1. **6**

2. **6**

3. **5**

4. **2**

5. **2**

6. **2**

7. **Use Line**

8. **Use Line**

9. **Use Line**

10. **Use Line**

11. **Use Line**

12. **Use Line**

13. **Use Line**

1) How many people owned a Playstation?

2) How many people owned a Xbox?

3) How many people owned a WiiU?

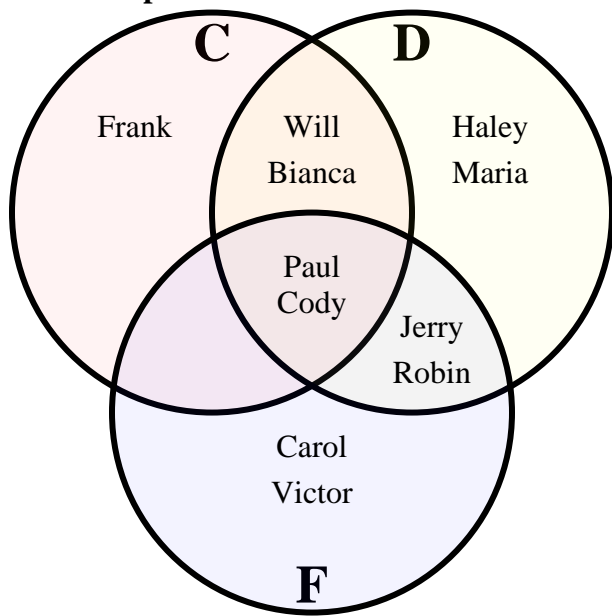**4)** How many people owned ONLY a Playstation?

5) How many people owned ONLY a Xbox?

6) How many people owned ONLY a WiiU?

7) $X \cup P =$ {Adam,Billy,Carol,Dave,Faye,Maria,Oliver,Robin,Tiffany}

8) $X \cap P =$ {Carol,Oliver,Tiffany}

9) W-X =   {George,Rachel,Robin}

10) $(W \cap X)$-P =   {Billy}

11) $(P \cup W)$-X =   {Adam,George,Maria,Rachel,Robin}

12) X =   {Billy,Carol,Dave,Faye,Oliver,Tiffany}

13) XWP =   {Carol}

1-10	92	85	77	69	62	54	46	38	31	23
11-13	15	8	0							

Solve each problem.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. **Use Line**

8. **Use Line**

9. **Use Line**

10. **Use Line**

11. **Use Line**

12. **Use Line**

13. **Use Line**

1) How many people owned a cat?

2) How many people owned a dog?

3) How many people owned a fish?
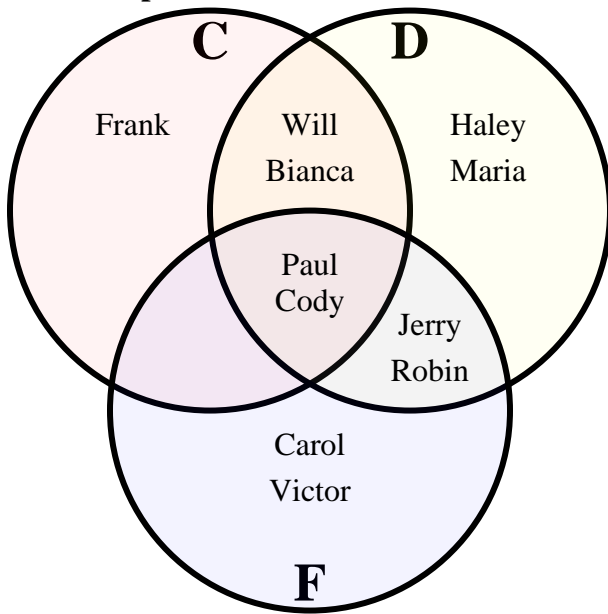
4) How many people owned ONLY a cat?

5) How many people owned ONLY a dog?

6) How many people owned ONLY a fish?

7) $F \cup D$ = _____

8) $F \cap D$ = _____

9) $D\text{-}C$ = _____

10) $(D \cap C)\text{-}F$ = _____

11) $(D \cup F)\text{-}C$ = _____

12) C = _____

13) FCD = _____

Math

1-10	92	85	77	69	62	54	46	38	31	23
11-13	15	8	0						

Name: **Answer Key**

Solve each problem.

Answers

1. _____ **5**

2. _____ **8**

3. _____ **6**

4. _____ **1**

5. _____ **2**

6. _____ **2**

7. _____ **Use Line**

8. _____ **Use Line**

9. _____ **Use Line**

10. _____ **Use Line**

11. _____ **Use Line**

12. _____ **Use Line**

13. _____ **Use Line**

1) How many people owned a cat?

2) How many people owned a dog?

3) How many people owned a fish?

4) How many people owned ONLY a cat?

5) How many people owned ONLY a dog?

6) How many people owned ONLY a fish?

7) F∪D = {Bianca,Carol,Cody,Haley,Jerry,Maria,Paul,Robin,Victor,Will}

8) F∩D = {Cody,Jerry,Paul,Robin}

9) D-C = {Haley,Jerry,Maria,Robin}

10) (D∩C)-F = {Bianca,Will}

11) (D∪F)-C = {Carol,Haley,Jerry,Maria,Robin,Victor}

12) C = {Bianca,Cody,Frank,Paul,Will}

13) FCD = {Cody,Paul}
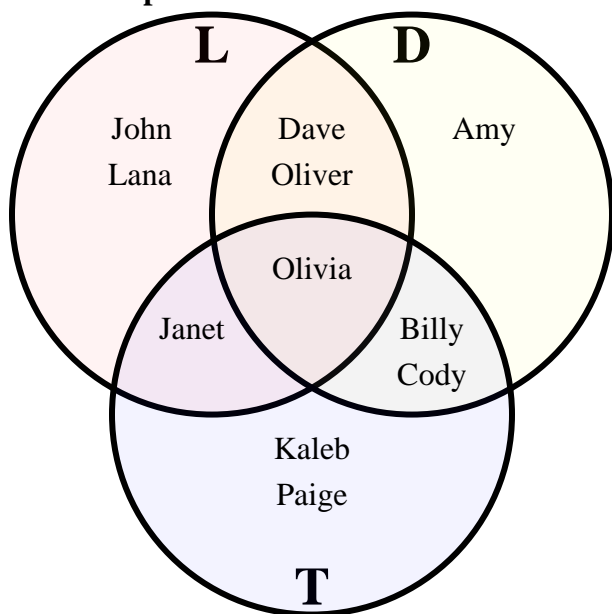
Math

2

1-10	92	85	77	69	62	54	46	38	31	23
11-13	15	8	0							

Name:

Solve each problem.

1) How many students owned a laptop computer?

2) How many students owned a desktop computer?

3) How many students owned a tablet?

4) How many students had ONLY a laptop computer?

5) How many students had ONLY a desktop computer?

6) How many students had ONLY a tablet?

7) T∪L = _____

8) D∩L = _____

9) L-T = _____

10) (L∩T)-D = _____

11) (D∪T)-L = _____

12) T = _____

13) DTL = _____

Math

www.CommonCoreSheets.com

3

Name:

Solve each problem.

Answers

1. _____ **6**

2. _____ **6**

3. _____ **6**

4. _____ **2**

5. _____ **1**

6. _____ **2**

7. _____ **Use Line**

8. _____ **Use Line**

9. _____ **Use Line**

10. _____ **Use Line**

11. _____ **Use Line**

12. _____ **Use Line**

13. _____ **Use Line**

1) How many students owned a laptop computer?

2) How many students owned a desktop computer?

3) How many students owned a tablet?
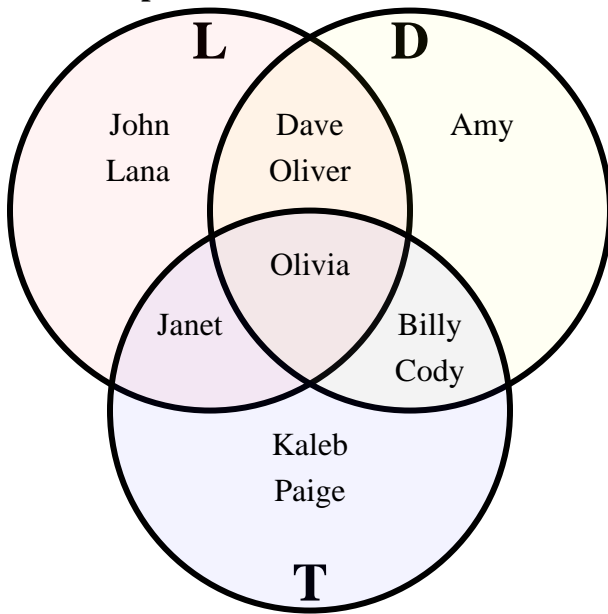
4) How many students had ONLY a laptop computer?

5) How many students had ONLY a desktop computer?

6) How many students had ONLY a tablet?

7) T∪L = _____ {Billy,Cody,Dave,Janet,John,Kaleb,Lana,Oliver,Olivia,Paige}

8) D∩L = _____ {Dave,Oliver,Olivia}

9) L-T = _____ {Dave,John,Lana,Oliver}

10) (L∩T)-D = _____ {Janet}

11) (D∪T)-L = _____ {Amy,Billy,Cody,Kaleb,Paige}

12) T = _____ {Billy,Cody,Janet,Kaleb,Olivia,Paige}

13) D∩L = _____ {Olivia}

Name: _____

Solve each problem.

L   D

Oliver   Amy   Kaleb
Debby   Carol   George

Gwen

Victor
Janet

Adam
Lana

T

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

1) How many students owned a laptop computer?

2) How many students owned a desktop computer?

3) How many students owned a tablet?

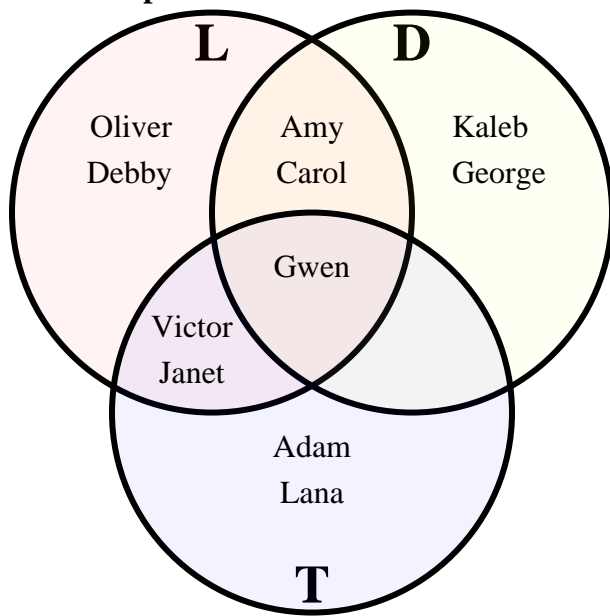**4)** How many students had ONLY a laptop computer?

5) How many students had ONLY a desktop computer?

6) How many students had ONLY a tablet?

7) T∪D = _____

8) D∩T = _____

9) T-D = _____

10) (L∩T)-D = _____

11) (L∪T)-D = _____

12) T = _____

13) LDT = _____

7. **Use Line**

8. **Use Line**

9. **Use Line**

10. **Use Line**

11. **Use Line**

12. **Use Line**

13. **Use Line**

Math   www.CommonCoreSheets.com

4

1-10	92	85	77	69	62	54	46	38	31	23
11-13	15	8	0							

Name:

Solve each problem.

Answers

L   D

| Oliver | Amy | Kaleb |
| Debby | Carol | George |

Gwen

Victor
Janet

Adam
Lana

T

1. **7**

2. **5**

3. **5**

4. **2**

5. **2**

6. **2**

7. **Use Line**

8. **Use Line**

9. **Use Line**

10. **Use Line**

11. **Use Line**

12. **Use Line**

13. **Use Line**

1) How many students owned a laptop computer?

2) How many students owned a desktop computer?

3) How many students owned a tablet?

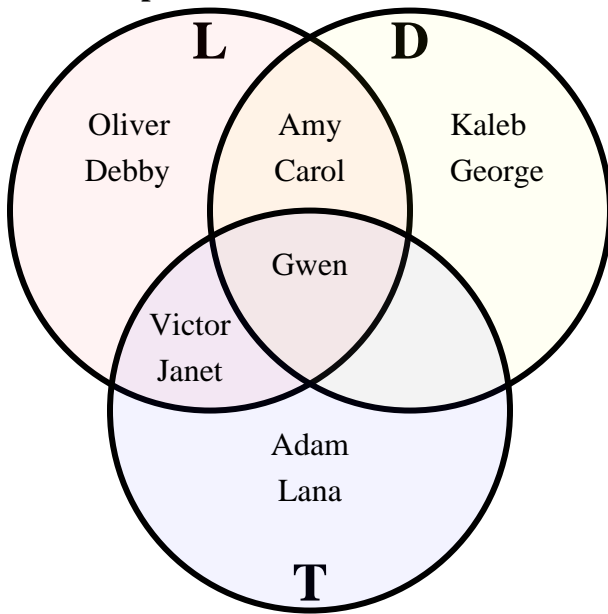**4)** How many students had ONLY a laptop computer?

5) How many students had ONLY a desktop computer?

6) How many students had ONLY a tablet?

7) T∪D = {Adam,Amy,Carol,George,Gwen,Janet,Kaleb,Lana,Victor}

8) D∩T = {Gwen}

9) T-D = {Adam,Janet,Lana,Victor}

10) (L∩T)-D = {Janet,Victor}

11) (L∪T)-D = {Adam,Debby,Janet,Lana,Oliver,Victor}

12) T = {Adam,Gwen,Janet,Lana,Victor}

13) LDT = {Gwen}
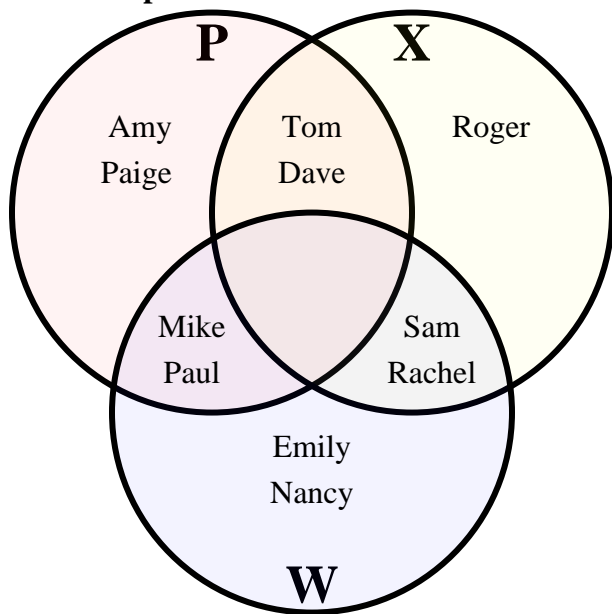
| 1-10 | 92 | 85 | 77 | 69 | 62 | 54 | 46 | 38 | 31 | 23 |
| 11-13 | 15 | 8 | 0 | | | | | | | |

Name: _____

Solve each problem.

P

X

Amy
Paige

Tom
Dave

Roger

Mike
Paul

Sam
Rachel

Emily
Nancy

W

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

1) How many people owned a Playstation?

2) How many people owned a Xbox?

3) How many people owned a WiiU?

4) How many people owned ONLY a Playstation?

5) How many people owned ONLY a Xbox?

6) How many people owned ONLY a WiiU?

7) X∪W = _____

8) W∩X = _____

9) W-X = _____

10) (P∩W)-X = _____

11) (P∪W)-X = _____

12) W = _____

13) XPW = _____

7. **Use Line**

8. **Use Line**

9. **Use Line**

10. **Use Line**

11. **Use Line**

12. **Use Line**

13. **Use Line**

Math   www.CommonCoreSheets.com   5

| 1-10 | 92 | 85 | 77 | 69 | 62 | 54 | 46 | 38 | 31 | 23 |
| 11-13 | 15 | 8 | 0 | | | | | | | |

Name: **Answer Key**

Solve each problem.

P

X

Amy
Paige

Tom
Dave

Roger

Mike
Paul

Sam
Rachel

Emily

Nancy

W

Answers

1. ___**6**___

2. ___**5**___

3. ___**6**___

4. ___**2**___

5. ___**1**___

6. ___**2**___

7. ___**Use Line**___

8. ___**Use Line**___

9. ___**Use Line**___

10. ___**Use Line**___

11. ___**Use Line**___

12. ___**Use Line**___

13. ___**Use Line**___

1) How many people owned a Playstation?

2) How many people owned a Xbox?

3) How many people owned a WiiU?
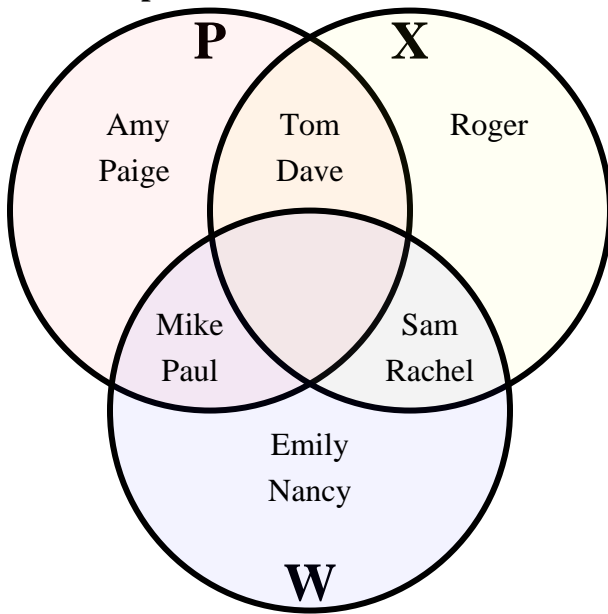
4) How many people owned ONLY a Playstation?

5) How many people owned ONLY a Xbox?

6) How many people owned ONLY a WiiU?

7) $X \cup W$ = ___{Dave,Emily,Mike,Nancy,Paul,Rachel,Roger,Sam,Tom}___

8) $W \cap X$ = ___{Rachel,Sam}___

9) $W - X$ = ___{Emily,Mike,Nancy,Paul}___

10) $(P \cap W) - X$ = ___{Mike,Paul}___

11) $(P \cup W) - X$ = ___{Amy,Emily,Mike,Nancy,Paige,Paul}___

12) W = ___{Emily,Mike,Nancy,Paul,Rachel,Sam}___

13) XPW = ___{ }___
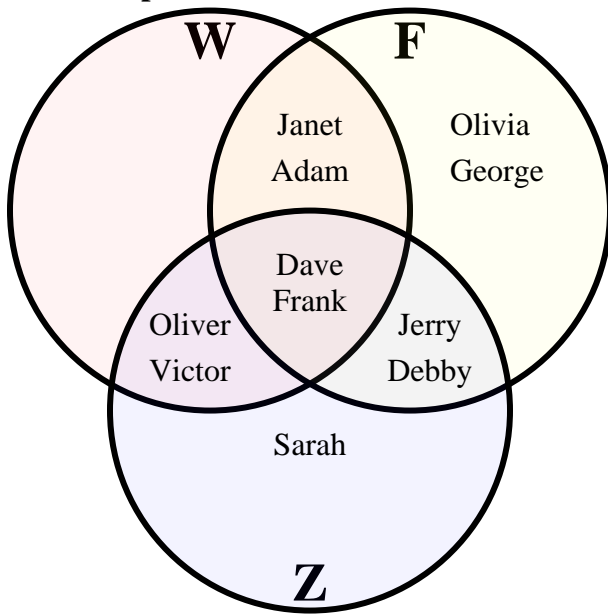
1-10	92	85	77	69	62	54	46	38	31	23
11-13	15	8	0							

Reading a Venn Diagram

Name:

Solve each problem.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. **Use Line**

8. **Use Line**

9. **Use Line**

10. **Use Line**

11. **Use Line**

12. **Use Line**

13. **Use Line**

1) How many people had been to the water park?

2) How many people had been to the fair?

3) How many people had been to the zoo?

4) How many people had ONLY been to the water park?

5) How many people had ONLY been to the fair?

6) How many people had ONLY been to the zoo?

7) W∪F = _____

8) W∩F = _____

9) W-Z = _____

10) (F∩W)-Z = _____

11) (W∪F)-Z = _____

12) W = _____

13) ZFW = _____

Math

www.CommonCoreSheets.com

6

1-10	92	85	77	69	62	54	46	38	31	23
11-13	15	8	0							

Name:

Solve each problem.

W **F**

Janet
Adam

Olivia
George

Dave
Frank

Oliver
Victor

Jerry
Debby

Sarah

Z

1) How many people had been to the water park?

2) How many people had been to the fair?

3) How many people had been to the zoo?
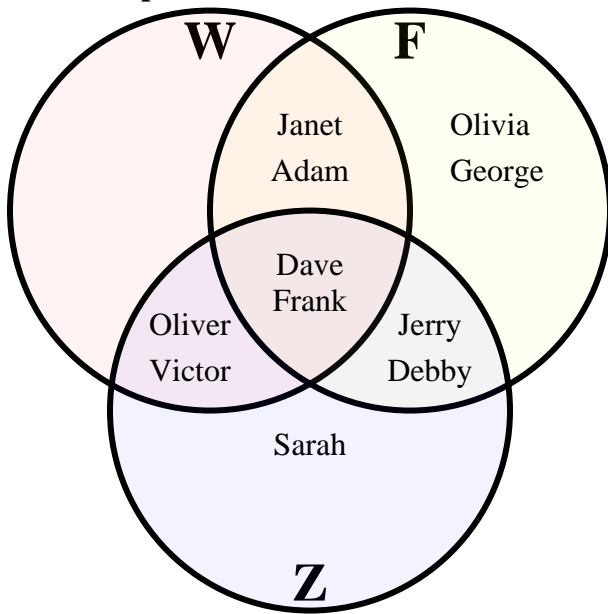
4) How many people had ONLY been to the water park?

5) How many people had ONLY been to the fair?

6) How many people had ONLY been to the zoo?

7) W∪F = {Adam,Dave,Debby,Frank,George,Janet,Jerry,Oliver,Olivia,Victor}

8) W∩F = {Adam,Dave,Frank,Janet}

9) W-Z = {Adam,Janet}

10) (F∩W)-Z = {Adam,Janet}

11) (W∪F)-Z = {Adam,George,Janet,Olivia}

12) W = {Adam,Dave,Frank,Janet,Oliver,Victor}
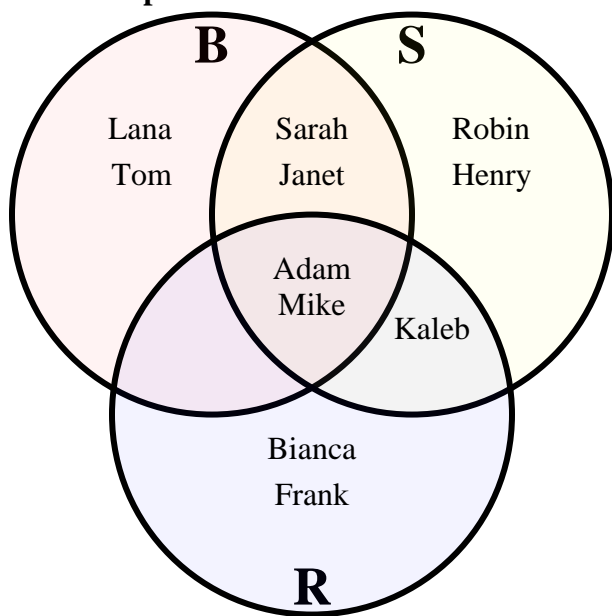
13) ZFW = {Dave,Frank}

Answers

1. **6**

2. **8**

3. **7**

4. **0**

5. **2**

6. **1**

7. **Use Line**

8. **Use Line**

9. **Use Line**

10. **Use Line**

11. **Use Line**

12. **Use Line**

13. **Use Line**

Math

6

1-10	92	85	77	69	62	54	46	38	31	23
11-13	15	8	0							

Solve each problem.

B: Lana, Tom
S: Robin, Henry
B∩S: Sarah, Janet
B∩S∩R: Adam, Mike
Kaleb
R: Bianca, Frank

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. **Use Line**

8. **Use Line**

9. **Use Line**

10. **Use Line**

11. **Use Line**

12. **Use Line**

13. **Use Line**

1) How many people had a bike?

2) How many people had a scooter?

3) How many people had roller blades?

4) How many people had ONLY a bike?

5) How many people had ONLY a scooter?

6) How many people had ONLY roller blades?

7) R∪B = _____

8) S∩R = _____

9) B-R = _____

10) (B∩R)-S = _____

11) (B∪R)-S = _____

12) B = _____

13) RBS = _____

1-10	92	85	77	69	62	54	46	38	31	23
11-13	15	8	0							

Solve each problem.

B   S

Lana   Sarah   Robin
Tom   Janet   Henry

Adam
Mike
Kaleb

Bianca
Frank

R

1. _____**6**_____

2. _____**7**_____

3. _____**5**_____

4. _____**2**_____

5. _____**2**_____

6. _____**2**_____

7. __**Use Line**__

8. __**Use Line**__

9. __**Use Line**__

10. __**Use Line**__

11. __**Use Line**__

12. __**Use Line**__

13. __**Use Line**__

1) How many people had a bike?

2) How many people had a scooter?

3) How many people had roller blades?
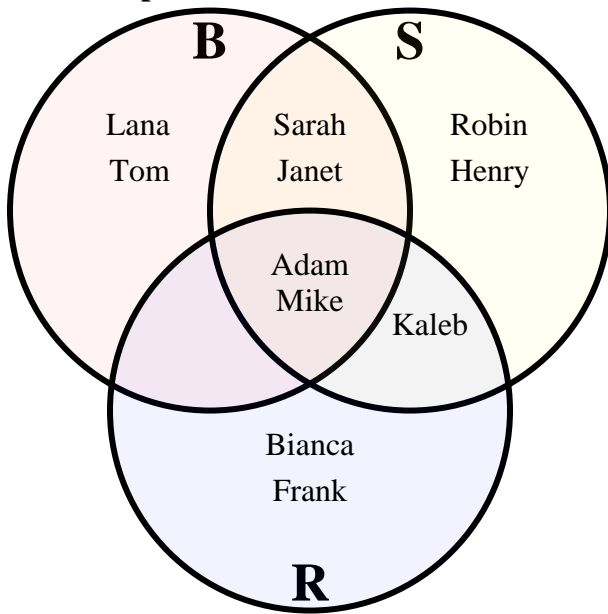
4) How many people had ONLY a bike?

5) How many people had ONLY a scooter?

6) How many people had ONLY roller blades?

7) $R \cup B$ = ___{Adam,Bianca,Frank,Janet,Kaleb,Lana,Mike,Sarah,Tom}___

8) $S \cap R$ = ___{Adam,Kaleb,Mike}___

9) B-R = ___{Janet,Lana,Sarah,Tom}___

10) $(B \cap R)$-S = ___{}___

11) $(B \cup R)$-S = ___{Bianca,Frank,Lana,Tom}___

12) B = ___{Adam,Janet,Lana,Mike,Sarah,Tom}___

13) RBS = ___{Adam,Mike}___
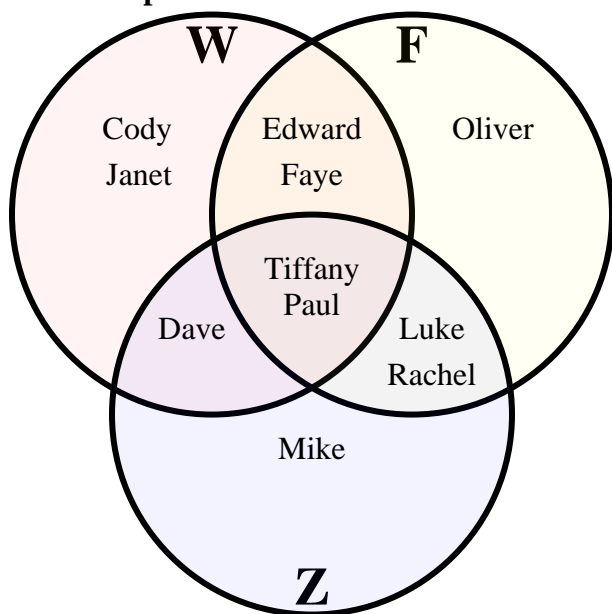
1-10	92	85	77	69	62	54	46	38	31	23
11-13	15	8	0							

Solve each problem.

W **F**

Cody
Janet

Edward
Faye

Oliver

Tiffany
Paul

Dave

Luke
Rachel

Mike

Z

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. **Use Line**

8. **Use Line**

9. **Use Line**

10. **Use Line**

11. **Use Line**

12. **Use Line**

13. **Use Line**

1) How many people had been to the water park?

2) How many people had been to the fair?

3) How many people had been to the zoo?

4) How many people had ONLY been to the water park?

5) How many people had ONLY been to the fair?

6) How many people had ONLY been to the zoo?

7) $W \cup F =$ _____

8) $Z \cap F =$ _____

9) $F-Z =$ _____

10) $(F \cap W)-Z =$ _____

11) $(F \cup W)-Z =$ _____

12) $F =$ _____

13) $ZWF =$ _____

1-10	92	85	77	69	62	54	46	38	31	23
11-13	15	8	0							

Name:

Solve each problem.

Answers

1. _____ **7**

2. _____ **7**

3. _____ **6**

4. _____ **2**

5. _____ **1**

6. _____ **1**

7. _____ **Use Line**

8. _____ **Use Line**

9. _____ **Use Line**

10. _____ **Use Line**

11. _____ **Use Line**

12. _____ **Use Line**

13. _____ **Use Line**

1) How many people had been to the water park?

2) How many people had been to the fair?

3) How many people had been to the zoo?
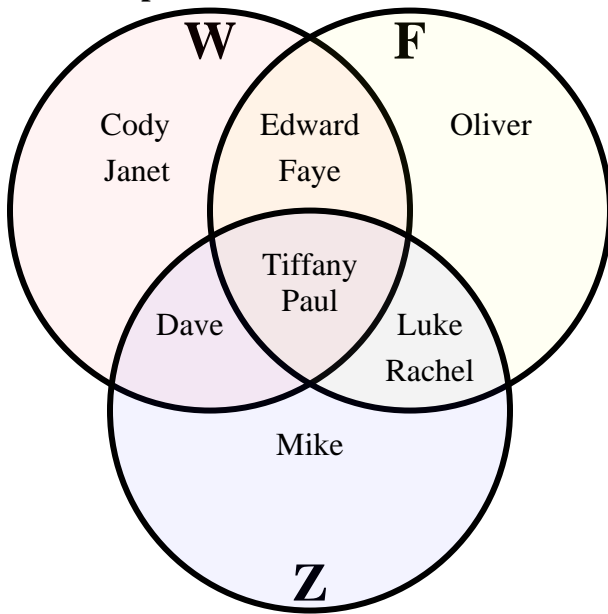
4) How many people had ONLY been to the water park?

5) How many people had ONLY been to the fair?

6) How many people had ONLY been to the zoo?

7) W∪F = _____ {Cody,Dave,Edward,Faye,Janet,Luke,Oliver,Paul,Rachel,Tiffany}

8) Z∩F = _____ {Luke,Paul,Rachel,Tiffany}

9) F-Z = _____ {Edward,Faye,Oliver}

10) (F∩W)-Z = _____ {Edward,Faye}

11) (F∪W)-Z = _____ {Cody,Edward,Faye,Janet,Oliver}

12) F = _____ {Edward,Faye,Luke,Oliver,Paul,Rachel,Tiffany}

13) ZWF = _____ {Paul,Tiffany}

1-10	92	85	77	69	62	54	46	38	31	23
11-13	15	8	0							

Name:

Solve each problem.

W F

Nancy
Janet

Tom
Luke

Bianca
George

Victor
John

Haley
Jerry

Katie

Z

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. **Use Line** _____

8. **Use Line** _____

9. **Use Line** _____

10. **Use Line** _____

11. **Use Line** _____

12. **Use Line** _____

13. **Use Line** _____

1) How many people had been to the water park?

2) How many people had been to the fair?

3) How many people had been to the zoo?

4) How many people had ONLY been to the water park?
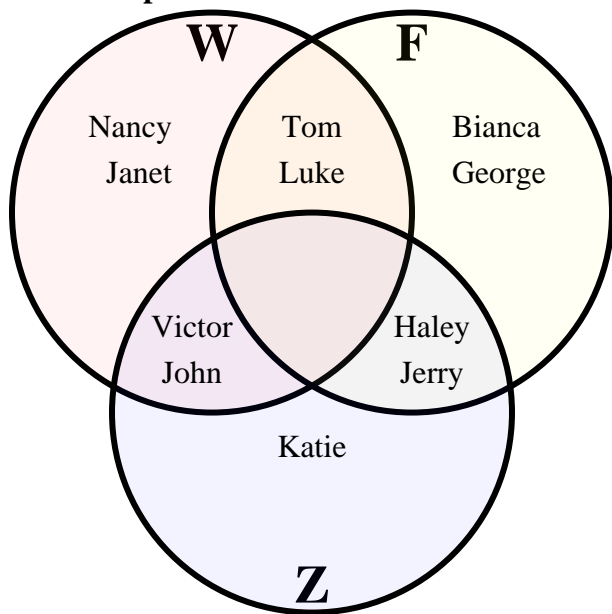
5) How many people had ONLY been to the fair?

6) How many people had ONLY been to the zoo?

7) F∪W = _____

8) F∩Z = _____

9) W-Z = _____

10) (W∩Z)-F = _____

11) (F∪W)-Z = _____

12) Z = _____

13) ZFW = _____

Math

www.CommonCoreSheets.com

9

1-10	92	85	77	69	62	54	46	38	31	23
11-13	15	8	0							

Name:

Solve each problem.

W   F

Nancy
Janet

Tom
Luke

Bianca
George

Victor
John

Haley
Jerry

Katie

Z

Answers

1. ___**6**___

2. ___**6**___

3. ___**5**___

4. ___**2**___

5. ___**2**___

6. ___**1**___

7. ___**Use Line**___

8. ___**Use Line**___

9. ___**Use Line**___

10. ___**Use Line**___

11. ___**Use Line**___

12. ___**Use Line**___

13. ___**Use Line**___

1) How many people had been to the water park?

2) How many people had been to the fair?

3) How many people had been to the zoo?

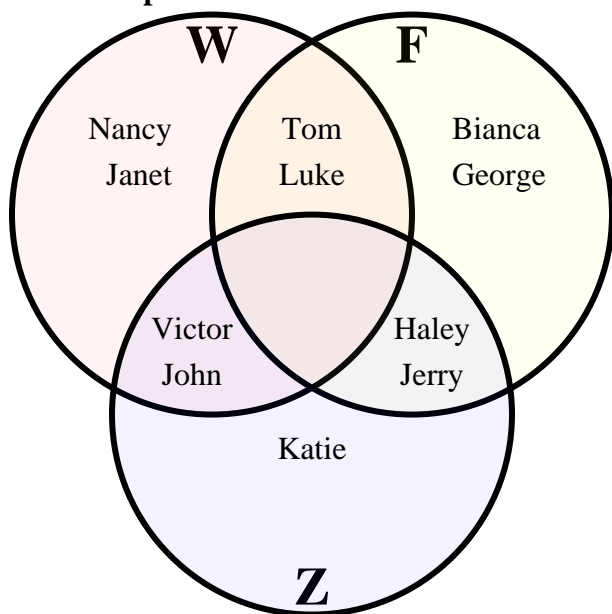**4)** How many people had ONLY been to the water park?

5) How many people had ONLY been to the fair?

6) How many people had ONLY been to the zoo?

7) F∪W = ___{Bianca,George,Haley,Janet,Jerry,John,Luke,Nancy,Tom,Victor}___

8) F∩Z = ___{Haley,Jerry}___

9) W-Z = ___{Janet,Luke,Nancy,Tom}___

10) (W∩Z)-F = ___{John,Victor}___

11) (F∪W)-Z = ___{Bianca,George,Janet,Luke,Nancy,Tom}___

12) Z = ___{Haley,Jerry,John,Katie,Victor}___

13) ZꟻW = ___{}___
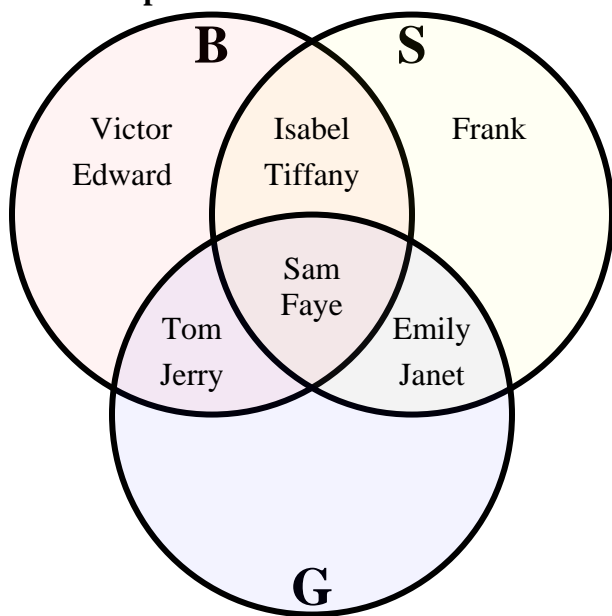
Math

www.CommonCoreSheets.com

9

1-10	92	85	77	69	62	54	46	38	31	23
11-13	15	8	0							

Name: _____

Solve each problem.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. **Use Line**

8. **Use Line**

9. **Use Line**

10. **Use Line**

11. **Use Line**

12. **Use Line**

13. **Use Line**

1) How many students played baseball?

2) How many students played soccer?

3) How many students played golf?

4) How many students played ONLY baseball?

5) How many students played ONLY soccer?

6) How many students played ONLY golf?

7) B∪S = _____

8) B∩S = _____

9) S-B = _____

10) (S∩G)-B = _____

11) (B∪G)-S = _____

12) S = _____

13) SGB = _____

1-10	92	85	77	69	62	54	46	38	31	23
11-13	15	8	0							

Solve each problem.

Answers

B   S

Victor   Isabel   Frank
Edward   Tiffany

Sam
Faye

Tom   Emily
Jerry   Janet

G

1. **8**

2. **7**

3. **6**

4. **2**

5. **1**

6. **0**

7. **Use Line**

8. **Use Line**

9. **Use Line**

10. **Use Line**

11. **Use Line**

12. **Use Line**

13. **Use Line**

1) How many students played baseball?

2) How many students played soccer?

3) How many students played golf?

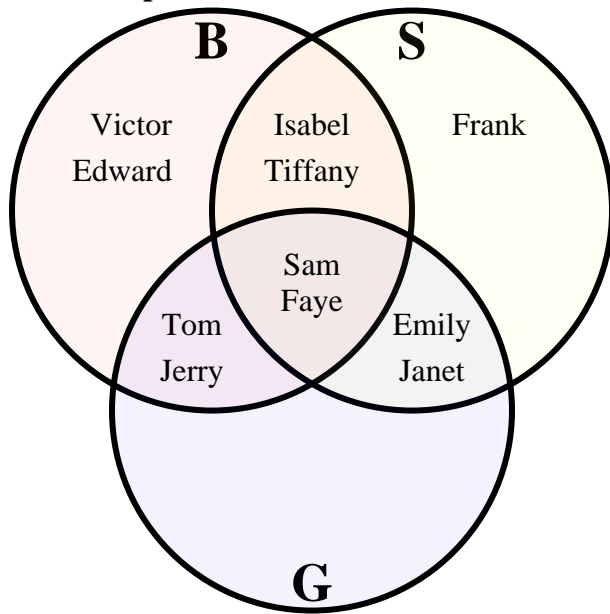**4)** How many students played ONLY baseball?

5) How many students played ONLY soccer?

6) How many students played ONLY golf?

7) B∪S = {Edward,Emily,Faye,Frank,Isabel,Janet,Jerry,Sam,Tiffany,Tom,Victor}

8) B∩S = {Faye,Isabel,Sam,Tiffany}

9) S-B = {Emily,Frank,Janet}

10) (S∩G)-B = {Emily,Janet}

11) (B∪G)-S = {Edward,Jerry,Tom,Victor}

12) S = {Emily,Faye,Frank,Isabel,Janet,Sam,Tiffany}

13) SGB = {Faye,Sam}

1-10	92	85	77	69	62	54	46	38	31	23
11-13	15	8	0							