7-1

Name _____ Date _____

Homework Practice

5NS1.5

Ordering Integers

Chapter Resources

Replace each _____ with < or > to make a true sentence.

1. −5 _____ 0 **2.** 25 _____ −15 **3.** 60 _____ 40 **4.** 12 _____ 10

5. 4 _____ −5 **6.** 19 _____ 18 **7.** −6 _____ −3 **8.** 75 _____ 90

9. −3 _____ −2 **10.** 83 _____ 59

Order each set of integers from least to greatest.

11. 14, 11, 2, 8, 9 _____

12. −50, 167, −240, 34, 17, 95 _____

13. −68, −113, 2, 89, 62, 7, −90 _____

14. 7, 81, 5, 12, −5, 100, 64 _____

15. 37, −90, 9, 16, 25, 432, −900 _____

Solve.

16. Anya, Carolina, and Maria are all waiting for their trains to arrive. Anya's train will arrive at 11 A.M., Carolina's train will arrive at 11:30 A.M., and Maria's train will arrive an hour before Carolina's. Order the three by who will arrive first.

_____

Spiral Review

Divide. Write in simplest form. (Lesson 6–11)

17. $5\frac{3}{5} \div \frac{2}{3}$ _____ **18.** $12 \div \frac{3}{4}$ _____ **19.** $\frac{4}{9} \div \frac{1}{8}$ _____

7-1

Name _____ Date _____

Problem-Solving Practice

5NS1.5

Ordering Integers

Solve.

1. Two people are waiting for their trains to arrive. The first person has to wait 23 minutes, and the second person has to wait 5 minutes. Who has the longest wait?

_____

2. On Monday, in Maine the temperature fell to −20°F, and in Vermont the temperature fell to 0°F. Which state is colder?

_____

3. Juan's test scores are: 100, 91, 98, 54, 75, 0. Order the set of scores from least to greatest.

_____

4. On her test sheet, in the box marked **Number Wrong**, Olivia got a −10 and Yolanda got a −20. Who has the lower score, Olivia or Yolanda?

_____

5. At 7:00 A.M., the temperature was −9°C. At noon, the temperature was 0°C. At 6:00 P.M., the temperature was −10°C. At what time was the temperature the coldest?

_____

6. In a go-cart race, Miguel's time was 50 seconds less than the average time. Danny's time was 30 seconds less than the average time. Who had the fastest time?

_____

7–2

Name _____ Date _____

Homework Practice

5NS2.1

Adding Integers

Chapter Resources

Add.

1. $+3 + (+4)$ _____
2. $+9 + (+8)$ _____
3. $6 + (-12)$ _____
4. $+9 + (+15)$ _____
5. $-7 + (+17)$ _____
6. $2 + (-1)$ _____
7. $+13 + (-4)$ _____
8. $+4 + (-7)$ _____
9. $-5 + (-15)$ _____

Solve.

10. The temperature outside is −2°F. If the temperature rises 2 degrees, what will the temperature be?

_____

11. At halftime in a football game, team A has lost 16 yards (−16) and team B has lost 32 yards (−32). Which team has lost the least?

_____

Spiral Review

Replace each _____ with < or > to make a true sentence. (Lesson 7–1)

12. −80 _____ 80
13. 6 _____ 5
14. −99 _____ 7
15. −8 _____ 0
16. −202 _____ −252
17. 12 _____ 8
18. −25 _____ −20
19. 75 _____ 85
20. 43 _____ −86

Order each set of integers from least to greatest.

21. 54, 52, −2, −8, 91 _____
22. −70, 22, −80, 34, 756, −965 _____
23. −4, −13, 2, −9, 52, 24, −90 _____

7-2

Name _____ Date _____

Problem-Solving Practice

5NS2.1

Adding Integers

Solve.

1. Before halftime in a football game, a team scored 21 points. After halftime, the team scored 6 more points. How many points did the team score?

_____

2. The temperature outside is 80°F. If the temperature rises 10°F, what will the temperature be?

_____

3. The temperature in Tahoe is −1°C. If the temperature falls 6°C, what will the temperature be?

_____

4. Diego and Ana are playing a board game. They both start on the same square. Diego first moves forward 2 squares, and on his next turn he moves backward 1 square. On her first turn, Ana moves forward 6 squares, and on her next turn she moves forward 4 squares. Who is ahead?

_____

5. Later in the game, Ana is forced to move back 10 squares, but then gains 1 square. How many squares did she move?

_____

6. During the next 6 plays, Diego loses 12 squares, but he also gains 12 squares. How many squares does he gain?

_____

7-3

Name _____ Date _____

Homework Practice

5NS2.1

Subtracting Integers

Subtract.

1. $7 - 2$ _____
2. $-9 - (-5)$ _____
3. $-4 - (-4)$ _____
4. $-9 - 10$ _____
5. $-7 - (-3)$ _____
6. $0 - (-1)$ _____
7. $-15 - 8$ _____
8. $-9 - (-3)$ _____

ALGEBRA

9. Evaluate $a - b$ if $a = 8$, and $b = 10$. _____
10. Find the value of $m - n$ if $m = -5$, and $n = 10$ _____

Spiral Review

Add. (Lesson 7–2)

11. $-7 + 2$ _____
12. $+9 + (-5)$ _____
13. $-4 + (-10)$ _____
14. $+9 + (-18)$ _____
15. $-7 + (-3)$ _____
16. $0 + (-1)$ _____
17. $+15 + 8$ _____
18. $-9 + (-3)$ _____

Solve.

19. The temperature outside is 23°C. If the temperature drops 24 degrees, what will the temperature be?

_____

20. At the start of a board game, with both players starting in the same square, Mary moved forward 8 squares and on her next turn backward 7 squares. On his first turn, Joe didn't move at all, but moved 2 squares on his second turn. Who is ahead?

_____

7–3

Name _____ Date _____

Problem-Solving Practice

5NS2.1

Subtracting Integers

Solve.

1. Jan receives $15 every week for her allowance. She has to spend $10 a week for lunches and $2 a week to ride the bus. How much money does she have left each week?

_____

2. One week, Jan got her usual $15 allowance. She spent $10 on lunches and $2 to ride the bus. She wants to buy a hat for $15. How much more money does Jan need?

_____

3. Jose and Juan are contestants on a game show. Currently, Jose has 24 points, and Juan has −4 points. How many more points does Jose have than Juan?

_____

4. Bernice ran a mile in 20 seconds more than her average time. Yesterday, she ran a mile in 10 seconds more than her average time. What is the difference between these times?

_____

5. John earns $40 every week by mowing grass. This week, he spent $35 on sneakers. How much money does John have left?

_____

6. John ran 5 miles every day the first week he started running. Now, he can run 10 miles every day. How many more miles can John now run each day?

_____

7-4

Name _____ Date _____

Homework Practice

6NS2.3

Multiplying Integers

Multiply.

1. $3 \times (-4)$ _____

2. $-9 \times (-8)$ _____

3. $6 \times (-12)$ _____

4. $-9 \times (5)$ _____

5. $-1 \times (-17)$ _____

6. $-2 \times (-10)$ _____

7. $12 \times (4)$ _____

8. $4 \times (-7)$ _____

9. -5×5 _____

10. $3 \times (-1)$ _____

ALGEBRA

11. Evaluate st if $s = -5$ and $t = 7$. _____

12. Find the value of ab if $a = -10$ and $b = -3$. _____

Spiral Review

Subtract. (Lesson 7-3)

13. $12 - 2$ _____

14. $-7 - (-5)$ _____

15. $-14 - 4$ _____

16. $-8 - 5$ _____

17. $0 - (-8)$ _____

18. $-16 - (-1)$ _____

Solve.

19. Jim receives $25 every week for his allowance. He has to spend $10 a week for lunches and $2 to ride the bus to his music lesson. How much does he have left?

_____

20. One week, Jim received his usual $25 allowance. He spent his usual $10 for lunches and $2 to ride the bus. Jim also bought a DVD for $18. How much money did Jim need to borrow to buy the DVD?

_____

7-4

Name _____ Date _____

Problem-Solving Practice

6NS2.3

Multiplying Integers

Solve.

1. For the past 5 years, the population of a city has decreased by 16 people a year. What is the city's population loss in relation to 5 years ago?

_____

2. Rey forgot his lunch money for the past 4 days and borrowed money from the cafeteria. If lunch costs $2.25, write an integer to show his balance for the past 4 days.

_____

3. Lina is reading a novel. She reads 29 pages each night for 6 nights. Write an integer to show the number of pages that Lina has read.

_____

4. The temperature in Carla's city is decreasing. For the past 9 days, the temperature has decreased by 3 degrees Fahrenheit each day. Write an integer to show how much the temperature has decreased.

_____

5. A public school loses 20 students each year due to transfers. If this pattern continues for the next 2 years, what will be the loss in relation to the original enrollment?

_____

6. Ozzy and Paul discovered a buried treasure. For 10 days, they removed 5 cubic meters of dirt each day from the site. What integer represents the change in the amount of soil at the site?

_____

7-5

Name _____ Date _____

Homework Practice

5MR1.1, 5NS2.1

Problem-Solving Strategy

Work Backward

Solve. Use the *work backward* strategy.

1. A number is divided by 3. Next, 2 is subtracted from the quotient. Then, 4 is added to the difference. If the result is 12, what is the number?

_____

2. Rey has $5 in change after buying a hamburger for $3.50 and a drink for $1.50. How much money did Rey have originally?

_____

3. Akiko is 5 years older than her brother Tai. Tai is 3 years older than their sister Kin. Kin is 6 years older than their brother Taro. If Taro is 15 years old, how old is Akiko?

_____

4. Lina is 15 years older than Alberto. Alberto is 5 years older than Sonia. Sonia is 8 years older than Ernesto. If Ernesto is 5 years old, how old is Lina?

_____

Spiral Review

Multiply. (Lesson 7–4)

5. $10 \times (-2)$ _____
6. $3 \times (6)$ _____
7. $4 \times (-2)$ _____
8. $9 \times (-9)$ _____
9. $-16 \times (-1)$ _____
10. $-6 \times (-10)$ _____
11. $12 \times (-4)$ _____
12. $8 \times (-7)$ _____
13. -9×6 _____
14. $50 \times (-1)$ _____

7-6

Name _____ Date _____

Homework Practice

6NS2.3

Dividing Integers

Divide.

1. $-10 \div 2$ _____ **2.** $42 \div 7$ _____ **3.** $36 \div (-6)$ _____

4. $-18 \div 2$ _____ **5.** $45 \div 9$ _____ **6.** $63 \div (-7)$ _____

7. $-15 \div 3$ _____ **8.** $49 \div 7$ _____ **9.** $-72 \div (-8)$ _____

10. $-24 \div 2$ _____ **11.** $40 \div 8$ _____ **12.** $-50 \div (-5)$ _____

ALGEBRA

13. Find the value of $c \div d$ if $c = -30$ and $d = 3$.

_____

14. What value of m makes $27 \div m = -9$ true?

_____

Solve.

15. Karen lost a total of 10 points over the last 2 rounds of a game. If she lost the same number of points each round, what integer represents her change in score each round?

_____

Spiral Review

Solve. Use the *work backward* strategy. (Lesson 7–5)

16. A number is multiplied by 10, and then −15 is added to the product. The result is 35. What is the number?

_____

7-6

Name _____ Date _____

Problem-Solving Practice

6NS2.3

Dividing Integers

Solve.

1. A football team was penalized a total of 30 yards in 3 plays. If the team was penalized an equal number of yards on each play, what integer represents the change in yardage for each penalty?

_____

2. Over 6 years, the number of registered voters in Sequoia Heights declined by 2,400. If the decline in numbers was the same each year, what integer represents the change per year?

_____

3. For the last 4 years, the average temperature of Clear Lake has dropped from 80°F to 72°F. If the decline in temperature was the same each year, what integer represents the change per year?

_____

4. Carlos lost a total of 16 points over the last 2 rounds of a game. If he lost the same number of points each round, what integer represents the change in his score each round?

_____

5. A plane starts above the clouds and then travels 50 feet toward the earth in 10 seconds. If the plane traveled an equal distance each second, what integer gives the change in altitude per second?

_____

7-7

Name _____ Date _____

Homework Practice

5NR2.4, 5NS2.1

Problem-Solving Investigation

Use any strategy shown below to solve.

- Logical reasoning
- Work backward
- Guess and check

1. Find the missing term in the pattern below.

..., _____, −6, −3, 0, 3, 6

_____

2. Yolanda needs to be home at 4:00 P.M. It takes her 20 minutes to walk home, 20 minutes to say goodbye to her friends, and 10 minutes to organize her books and notebooks at school. What is the latest time she should start getting ready to come home?

_____

Spiral Review

Divide. (Lesson 7-6)

3. 12 ÷ 2 _____

4. 60 ÷ (−6) _____

5. 24 ÷ (−6) _____

6. −9 ÷ 3 _____

7. 81 ÷ 9 _____

8. 48 ÷ (−6) _____

9. −35 ÷ 5 _____

10. 64 ÷ 8 _____

11. −21 ÷ (−7) _____

ALGEBRA

12. Find the value of $c \div d$ if $c = -32$ and $d = 4$.

_____

13. What value of m makes $-9 \div m = -9$ true?

_____

7-8

Name _____ Date _____

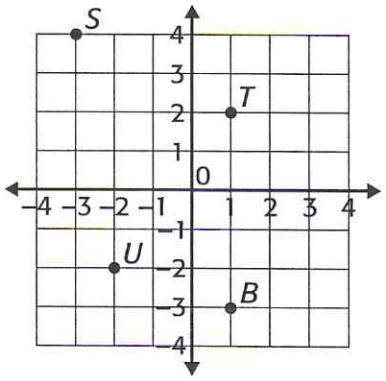
Homework Practice

5AF1.4

The Coordinate Plane

Chapter Resources

Use the coordinate plane at the right. Identify the point for each ordered pair.



1. (3, 4) _____

2. (−4, 3) _____

3. (−4, −4) _____

4. (−2, 2) _____

Write the ordered pair that names each point. Then, identify the quadrant where each point is located.

5. *T* _____

6. *S* _____

7. *U* _____

8. *B* _____

Graph and label each point on a coordinate plane.

9. *N* (2, 1)

10. *M* (−3, −2)

11. *P* (−3, 2)

12. *F* (2, −2)

Spiral Review

Use any strategy shown below to solve. (Lesson 7–7)

The four-step plan
Logical reasoning
Work backward
Guess and check

13. Sean needs to be at practice at 10:00 A.M. every Saturday. It takes him 30 minutes to walk to practice, 30 minutes to get ready, and 10 minutes to organize his equipment. What is the latest time he should start getting ready for practice?

_____

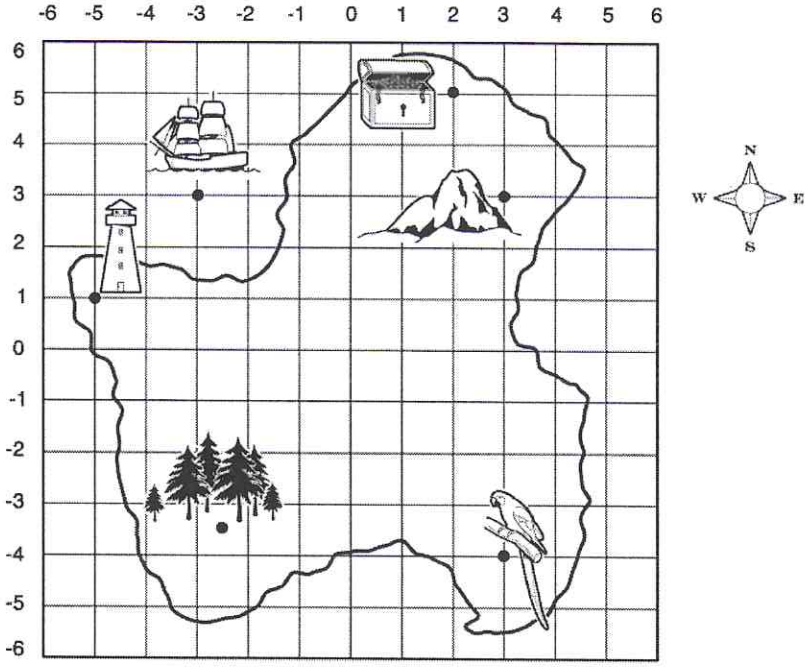
7–8

Name _____ Date _____

Problem-Solving Practice

5AF1.4

The Coordinate Plane



1. What are the coordinates of the pirate ship? In which quadrant is it located?

_____

2. What is located at the ordered pair (−2.5, −3.5)?

_____

3. Begin at the lookout tower. Travel east 7 units and north 4 units. Where are you?

_____

4. Which is the farthest south: the buried treasure, the mountain, or the parrot?

_____

7-9

Name _____ Date _____

Homework Practice

5AF1.5

Solving Addition Equations

Solve each equation. Check your solution.

1. $y + 4 = 8$ _____

2. $10 = 5 + d$ _____

3. $x + 2 = -12$ _____

4. $y + 7 = -16$ _____

5. $x + 0 = -1$ _____

6. $y + 3 = -8$ _____

7. $y + 9 = 18$ _____

8. $0 = 5 + d$ _____

9. $x + \frac{3}{4} = 3\frac{1}{2}$ _____

10. $5\frac{1}{2} = 5 + d$ _____

11. $x + 6 = -12$ _____

12. $-10.1 = 7 + d$ _____

13. $y + 6.9 = 2.6$ _____

14. $-3.9 = 2.3 + d$ _____

15. $x + 1.5 = 3$ _____

Solve.

16. Andrew weighs 94 pounds with his new boots on. Without them, Andrew weighs 92 pounds. Write and solve an addition equation to find the weight of the boots.

_____

Spiral Review

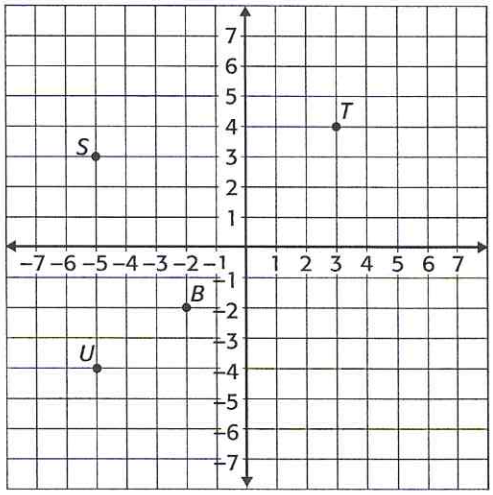
Use the coordinate plane. Identify the point for each ordered pair. (Lesson 7-8)

17. (3, 4)

18. (−5, 3)

19. (−5, −4)

20. (−2, −2)



7–9

Name _____ Date _____

Problem-Solving Practice

5AF1.5

Solving Addition Equations

Write an equation to solve.

1. Eugene's football team scored 17 points in a football game, 6 of which Eugene scored. How many points did the rest of the team score?

_____

2. Dottie read her book on Wednesday and Thursday. If she read 27 pages on Wednesday and read 64 pages in all, how many pages did she read on Thursday?

_____

Solve.

3. Margarita had to measure butter for a recipe. She did not want to measure it directly in a cup because some butter would stick to the side of it. She put $1\frac{1}{2}$ cups cold water into a measuring cup and added butter until the level of the water read 2 cups. How much butter did she measure?

_____

4. Silas rode his bicycle 2.5 blocks to his friend's house. From there, the two boys rode the rest of the way to school. If it is 8.7 blocks from Silas's house to the school, how far is it from his friend's house to the school?

_____

5. Flora had saved a total of $24.85. She went to a department store and bought a pair of gloves and a hat that matched her winter coat. If the gloves cost $6.85 and she had $10.45 left over, what did the hat cost?

_____

6. Diane's parents bought three boxes of tiles to replace the old tiles on their kitchen floor. Each tile is one square foot, and there are 30 tiles to a box. The kitchen floor is 78 square feet. How many tiles will they have left over?

_____

7–10

Name _____ Date _____

Homework Practice

5AF1.5

Solving Subtraction Equations

Chapter Resources

Solve each equation. Check your solution.

1. $y - 4 = 2$ _____

2. $5 = 5 - d$ _____

3. $-4 = 11 - d$ _____

4. $x - 8 = -3$ _____

5. $y - 4 = -7$ _____

6. $8 = 13\frac{1}{2} - d$ _____

7. $-3 = d - 9$ _____

8. $x - 6 = -1$ _____

9. $y - 1\frac{1}{2} = 2$ _____

10. $-4.2 = -7.5 - d$ _____

11. $x - 1.1 = 1.9$ _____

12. $-4.5 - x = -4$ _____

Solve.

13. The difference between record high and record low temperatures for August in New York City is 40°F. The record low is 60°F. Write and solve an equation to find the record high temperature of summer in New York City.

_____

Spiral Review

Solve each equation. Check your solution. (Lesson 7–9)

14. $y + 9 = 18$ _____

15. $-2.4 = 1.1 + d$ _____

16. $t + \frac{1}{2} = 9$ _____

17. $-12 = -6 + d$ _____

18. $x + 10 = -12$ _____

19. $m + -3 = 0$ _____

20. $s + 1.5 = 3$ _____

21. $25 = 5 + d$ _____

22. $x + 7 = -14$ _____

Solve.

23. Usually, running burns 300 more calories per hour than swimming does. If Emily burns 400 calories per hour running, write and solve an addition equation to find how many calories Emily will burn swimming.

_____

7–10

Name _____ Date _____

Problem-Solving Practice

5AF1.5

Solving Subtraction Equations

Write an equation. Then solve.

1. Doug had 250 liters of soup to serve in the cafeteria. After lunch, 27 liters were left over. How much soup was served?

_____

2. Alisa and other students write articles for the school newspaper. The next issue of the newspaper will contain 87 articles. Alisa finished writing all of her articles, and now there are 75 articles left for the other students to write. How many articles did Alisa write?

_____

3. Ted has a choice of two summer camps, one of which is 26.7 miles from home and one that is 98.3 miles from home. How much farther is the second camp from Ted's home?

_____

4. Jaida and her sister shared a mushroom and pepperoni pizza. Jaida ate $\frac{1}{2}$ of the pizza. After her sister had some, there was $\frac{1}{6}$ of the pizza left. How much did her sister eat?

_____

5. Rosanne wanted to compare the amount of electricity she used in the summer to the amount she used in the winter. The reading on her electric meter at the first of January was 1587 kWh (kilowatt-hour) and the reading at the first of February was 1746 kWh. How many kWh did she use in January? _____ kWh

The following summer, the reading at the first of July was 2047 kWh, and the reading at the first of August was 2238 kWh. How many kWh did she use in July? _____ kWh

How many more kWh did she use in July than in January? _____ kWh

6. Martin has birdhouses outside his home. When he checked them two weeks ago, three of them had bluebirds, four of them had sparrows, and the rest of them had martins. When he checked them last week, half of the houses that had martins had been taken over by blue jays. If he has 11 birdhouses, how many of them contained blue jays?

_____

7-11

Name _____ Date _____

Homework Practice

5AF1.5

Solving Multiplication Equations

Solve each equation. Check your solution.

1. $6b = 24$ _____ **2.** $-8m = -32$ _____ **3.** $49 = 7x$ _____

4. $2y = 10$ _____ **5.** $-1t = -12$ _____ **6.** $63 = 7x$ _____

7. $8a = 24$ _____ **8.** $-2s = -22$ _____ **9.** $54 = 6y$ _____

Solve.

10. Maria painted flowers on 10 plates and earned $50. Write and solve an equation to find out how much she earned for each plate.

_____

Spiral Review

Solve each equation. Check your solution. (Lesson 7–10)

11. $y - 4 = 2$ _____ **12.** $-4 = -11 - d$ _____ **13.** $-4.5 - x = -4$ _____

14. $x - 8 = -3$ _____ **15.** $y - 4 = -7$ _____ **16.** $8\frac{1}{2} = 13\frac{1}{2} - d$ _____

17. $-5 = d - 10$ _____ **18.** $t - 9\frac{1}{2} = -4\frac{1}{2}$ _____ **19.** $-1.1 = -10.5 - d$ _____

Solve.

20. Joe is 3 inches shorter than his brother Jack. Jack is 60 inches tall. Write and solve an equation to find out how tall Joe is.

_____

7-11

Name _____ Date _____

Problem-Solving Practice

5AF1.5

Solving Multiplication Equations

Write an equation. Then solve.

1. Samantha has 7 tomato plants in 12 rows. How many tomato plants does she have?

_____

2. If Calah cuts 16 pizzas into 8 slices each, how many total slices will she have?

_____

3. Olivia raises 12 chickens on her farm. If each chicken lays 20 eggs in two weeks, how many eggs will she gather?

_____

4. Juan works a total of 5 hours at his after-school job. If he earns $7 per hour worked, how much does he earn altogether?

_____

5. Sophia has a large family. There are 8 people sitting at each of 6 tables. When they all get together for a holiday dinner, how many people are there?

_____

6. Jacob likes to go on nature walks. On one of his walks, he noticed 5 different types of insects. He also saw 2 types of plants and 1 lizard. His walk covered only 1 acre. If he walked over 4 acres, how many things might he have seen?

_____