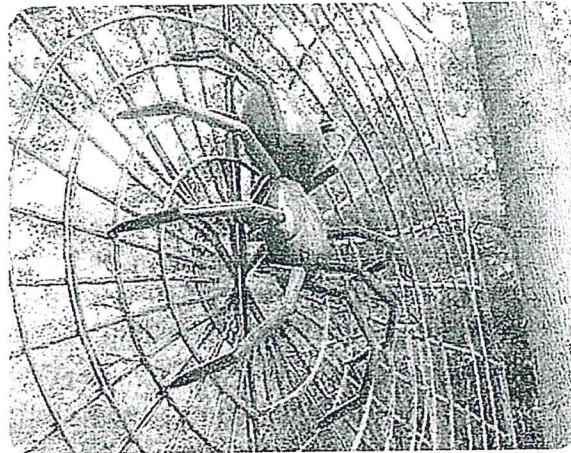


Read the science article. Then answer the questions that follow.

BIG Bugs

by Jennifer Mattox, *Highlights*

- 1 Imagine walking through the park on a sunny day. You look up to see a spider twice the size of your head. It looks so real that it seems to be creeping down its web toward you.
- 2 Before you scream and run away, look closer. That 50-pound spider is a wood sculpture. It was made by artist David Rogers and is one of 14 bugs he has on display in parks and gardens around the United States.



Ants the Size of a Bus!

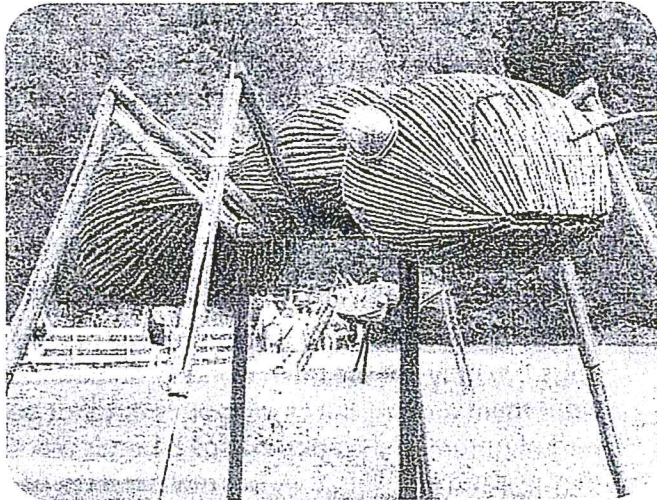
- 3 David's collection is called **Big Bugs**. It includes three monster ants. Each one stretches 25 feet long. That's almost as long as a school bus! The collection also includes a praying mantis that weighs 1,200 pounds. How heavy is that? It would be like picking up six grown men at once. Some of David's other bugs are a grasshopper, an assassin bug, and a ladybug—all big enough to sit on.
- 4 Real bugs are tiny. So why did David build his so large?
- 5 David hopes his jumbo sculptures will help us to stop and notice bugs. We may not see them working. Sometimes we may not even want them around. But David points out that bugs are an important part of nature. They make the soil a better place for plants to grow, they pollinate flowers, they eat other insects, and they are food to many creatures.

Bugs Under Construction

- 6 Making such massive art is not easy. Some of the bugs took three months to construct.
- 7 David began by carving pieces of wood into just the right shape and size. He used a mix of black walnut, red cedar, and black locust woods to craft each bug. He also used young willow trees to show texture in his ladybug and ants.
- 8 He then connected the parts using metal rods. Finally, he gave them a coat of varnish for a smooth, shiny finish.

Sticks and Strings

- 9 As a child, David Rogers did not get the best grades. He was not even the best painter. But he loved to make things. Using only sticks and string, he would build tiny villages small enough for an insect.
- 10 One day when he was older, he saw a bent tree that reminded him of the backbone of an animal. He decided to form a giant beast by adding more branches. The result was a dinosaur named Goliath. Goliath was his first large sculpture.
- 11 David has also made sculptures by welding metal. By joining together old car parts, he made a housefly and a dragonfly. Does this sound like fun to you? Good news—David believes there's an artist in everyone.
- 12 Of course, you probably won't start out by making a 25-foot ant. It took David years to come up with his huge bugs. But as David says, "There's no right or wrong way to express yourself with art. Let your imagination run free."



▶ Think

RI.3.5

1 Next to each fact about David Rogers and his Big Bug art, write the letter of the heading that shows where the fact can be found.

- A **Ants the Size of a Bus!**
- B **Bugs Under Construction**
- C **Sticks and Strings**

_____ David built tiny villages when he was a child.

_____ All of David's bugs are big enough to sit on.

_____ Different kinds of wood are used in David's art.

_____ David named his first large sculpture "Goliath."

_____ David hopes his art will help people notice bugs more.

2 Read paragraphs 4 and 5 from the article.

RI.3.4

4 Real bugs are tiny. So why did David build his so large?

5 David hopes his jumbo sculptures will help us to stop and notice bugs. We may not see them working. Sometimes we may not even want them around. But David points out that bugs are an important part of nature. They make the soil a better place for plants to grow, they pollinate flowers, they eat other insects, and they are food to many creatures.

What does the word jumbo mean in paragraph 5?

- A beautiful
- B large
- C new
- D tiny

4 With which statement would the author **most likely** agree?

RI.3.6

- A Although David's sculptures are interesting, they are too large and heavy.
- B Although bugs are an interesting subject for sculptures, they are not an important part of nature.
- C Although David was not the best painter as a child, he became a talented artist as an adult.
- D Although David's sculptures are huge, they are not difficult to make.

5 Which text feature would **best** help you find facts about how David built his bug art?

RI.3.5

- A the heading "Ants the Size of a Bus!"
- B the heading "Bugs Under Construction"
- C the keywords **Big Bugs** in paragraph 3
- D the picture of the ant sculpture

6 This question has two parts. First answer Part A. Then answer Part B.

RI.3.4

Part A

Reread paragraph 11. What does the word welding mean as it is used in paragraph 11?

- A connecting
- B making bigger
- C adding branches
- D imagining

Part B

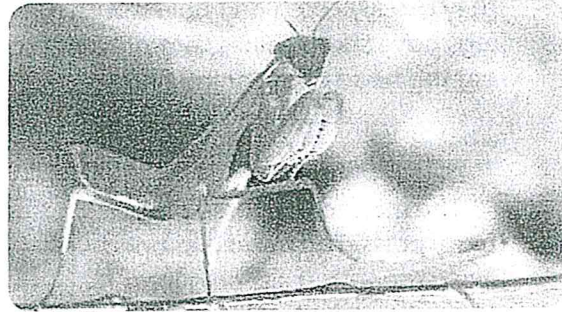
Which phrase from paragraph 11 **best** supports the answer to Part A?

- A "joining together old car parts"
- B "he made a housefly and a dragonfly"
- C "sound like fun"
- D "there's an artist in everyone"

Read the science article. Then answer the questions that follow.

The Praying Mantid

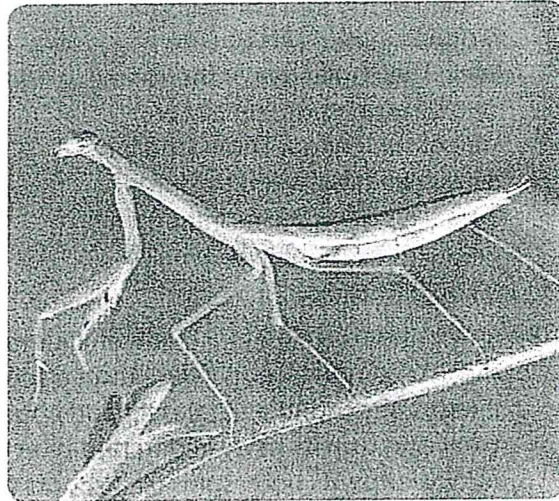
by Sophie Burmeister



- 1 The praying mantid is an insect that looks like a thin green or brown stick. It gets its name from the way its two front legs can bend. It looks as if it were praying. Most people call this insect a "praying mantis." But its real name is the "praying mantid."

Helpful Eaters

- 2 Praying mantids are **carnivores**. They eat other small animals and insects. They eat moths, grasshoppers, and flies. Some even eat lizards and frogs!
- 3 The eating habits of mantids are helpful to people. Farmers like mantids because they eat insects that could hurt their crops. Gardeners also like mantids. Mantids eat pesky insects that eat fruit and flowers.



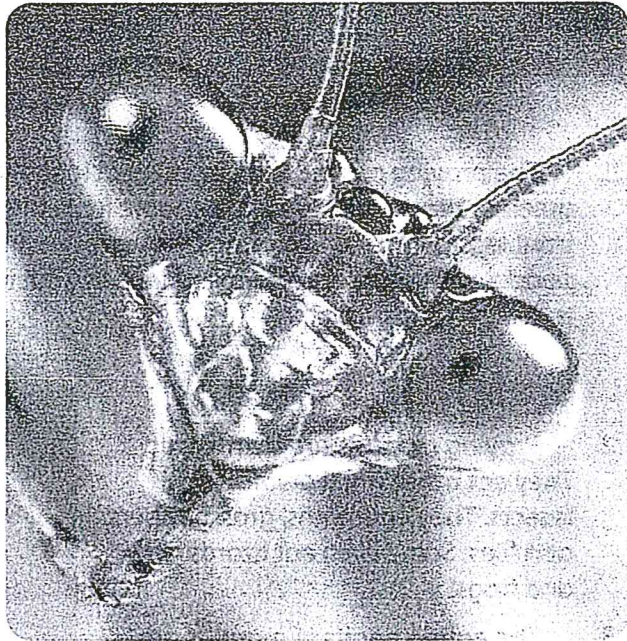
Mighty Hunters

- 4 Tiny but mighty, mantids are skillful hunters. They have an interesting way of hunting their meals. Mantids camouflage themselves. They change their body color to match plants and trees near by. This makes them seem like a part of their background.

- 5 They can sit patiently for a long period of time and look like a branch or leaf. When their prey gets close enough, they quickly catch and hold it with their front legs. These legs have sharp spines that prevent escape. Most mantids eat the head of the animal first.

The Amazing Mantid

- 6 The mantid has three main body parts. The **head** is shaped like a triangle. It sits on a long thin neck, called a **thorax**. The thorax is connected to a long body, called an **abdomen**. Mantids are the only insects in the world that can turn their heads 180 degrees. That's a full half turn.



- 7 One of the most amazing features of mantids are their eyes. They have five of them! Two large eyes are on either side of their head. Three smaller eyes are set between the larger eyes. This gives the mantid excellent eyesight, which helps it catch its prey.
- 8 Mantids are super fast, graceful jumpers. They can make a complete leap in less than a second. Right before it leaps, the mantid wiggles its body back and forth. It can twist and turn its body in different directions. When it finally leaps, its body spins as it shoots through the air.
- 9 People have been fascinated with praying mantids for thousands of years. There are even rock paintings of mantids made by ancient people. The mantid is an awesome insect!

Fast Facts

- North America has only 20 kinds of mantids, while Africa has 880 species.
- Mantids live in warm or hot areas of the world.
- Most mantids are less than six inches long.

▶ Think

- 6 This question has two parts. First answer Part A. Then answer Part B.

RI.3.4

Part A

What does the word prey mean in paragraph 5?

- A an animal that is very similar in size to another animal
- B an animal that is caught and eaten by another animal
- C an animal that looks like it is praying
- D an animal with legs that look like spines

Part B

Which **two** sentences from paragraph 5 **best** support the answer to Part A?

- A "They can sit patiently for a long period of time and look like a branch or leaf."
- B "When their prey gets close enough, they quickly catch and hold it with their front legs."
- C "These legs have sharp spines that prevent escape."
- D "Most mantids eat the head of the animal first."

- 7 With which **two** statements would the author **most likely** agree?

RI.3.6

- A Farmers should keep mantids away from their crops.
- B The way mantids catch and eat their prey is cruel.
- C It's not surprising that mantids have fascinated people for a long time.
- D It's unlikely that mantids can make a complete leap in less than a second.
- E Most farmers would be glad to find mantids on their farms.
- F Mantids have bad eyesight that make it hard for them to catch prey.

- 8 Mantids have three main body parts. Which text feature calls attention to these body parts?

RI.3.5

- A heading
- B sidebar
- C key words
- D title

 This question has two parts. First answer Part A. Then answer Part B.

RI.3.5

Part A

Which text feature would help you find out why gardeners like mantids?

- A the heading "Helpful Eaters"
- B the picture of the mantid on a leaf stem
- C the key word "**carnivores**" in paragraph 2
- D the sidebar "Fast Facts"

Part B

Which sentence from the article **best** supports the answer to Part A?

- A "Mantids eat pesky insects that eat fruit and flowers."
- B "Mantids are super fast, graceful jumpers."
- C "One of the most amazing features of mantids are their eyes."
- D "People have been fascinated with praying mantids for thousands of years."

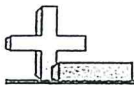
 Read the sentences from the article.

RI.3.4

They have an interesting way of hunting their meals. Mantids camouflage themselves. They change their body color to match plants and trees near by.

Which phrase from these sentences provides the **best** clue to the meaning of camouflage?

- A "an interesting way"
- B "hunting their meals"
- C "change their body color"
- D "plants and trees near by"



Solve each problem.

Answers

1,561	2,736	1,268	1,973	1,762
1,822	1,106	2,171	1,516	2,331

- 1) A farmer was planting vegetables in a garden. He planted 623 corn seeds, 519 turnip seeds and 831 potato seeds. How many seeds did he plant total?
- 2) At Isabel's school there are 971 students in 3rd grade, 281 students in 4th grade and 919 students in 5th grade. How many students were there in all three grades?
- 3) For a new year's party 911 red balloons, 910 green balloons and 915 white balloons were used. What is the total number of balloons used?
- 4) A zoologist was checking the weights of three gorillas. Gorilla A weighed 559 pounds, gorilla B weighed 827 pounds and gorilla C weighed 130 pounds. What is the combined weight of all three gorillas?
- 5) While working on his car, Kaleb spent 584 bucks on a new paint job, \$309 on the transmission and 213 dollars on the interior. How much money did he spend total?
- 6) Carl, Amy and Ed were collecting cans for recycling. Carl collected 178 cans, Amy collected 498 and Ed collected 592. What is the total number of cans all three friends collected?
- 7) While building a house, an architect used 956 nails on the first floor, 351 on the second and 515 on the third floor. How many nails did he use on all three floors?
- 8) A donation center received 479 cans of corn, 887 cans of peas and 396 cans of green beans. How many cans did they receive total?
- 9) A school had 945 red pens, 393 blue pens and 993 black pens. How many pens did they have total?
- 10) In a month, a video store rented out 509 action movies, 747 comedies and 305 other types of movies. What is the sum of the movies they rented in a month?

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____



Use subtraction to solve the following problems.

Answers

14	2,251	1,383	7,468
4,409	3,613	6,121	1,145
4,398	683	4,039	2,359
662	802	5,565	4,353

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____

16. _____

$$\begin{array}{r} 1) \ 8,007 \\ - 3,598 \\ \hline \end{array}$$

$$\begin{array}{r} 2) \ 5,007 \\ - \ 968 \\ \hline \end{array}$$

$$\begin{array}{r} 3) \ 7,002 \\ - 3,389 \\ \hline \end{array}$$

$$\begin{array}{r} 4) \ 1,001 \\ - \ 199 \\ \hline \end{array}$$

$$\begin{array}{r} 5) \ 8,006 \\ - \ 538 \\ \hline \end{array}$$

$$\begin{array}{r} 6) \ 6,004 \\ - 1,606 \\ \hline \end{array}$$

$$\begin{array}{r} 7) \ 5,002 \\ - 2,643 \\ \hline \end{array}$$

$$\begin{array}{r} 8) \ 7,008 \\ - 1,443 \\ \hline \end{array}$$

$$\begin{array}{r} 9) \ 1,003 \\ - \ 320 \\ \hline \end{array}$$

$$\begin{array}{r} 10) \ 2,005 \\ - \ 622 \\ \hline \end{array}$$

$$\begin{array}{r} 11) \ 7,001 \\ - 6,339 \\ \hline \end{array}$$

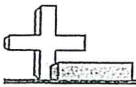
$$\begin{array}{r} 12) \ 3,001 \\ - 2,987 \\ \hline \end{array}$$

$$\begin{array}{r} 13) \ 8,004 \\ - 1,883 \\ \hline \end{array}$$

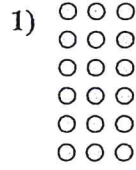
$$\begin{array}{r} 14) \ 8,004 \\ - 6,859 \\ \hline \end{array}$$

$$\begin{array}{r} 15) \ 3,003 \\ - \ 752 \\ \hline \end{array}$$

$$\begin{array}{r} 16) \ 9,003 \\ - 4,650 \\ \hline \end{array}$$



Write each array as a multiplication problem and solve.



Answers

Ex. $4 \times 4 = 16$

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

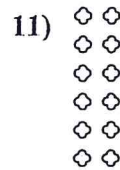
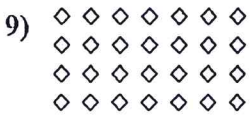
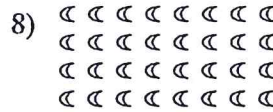
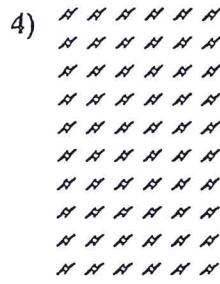
7. _____

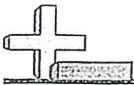
8. _____

9. _____

10. _____

11. _____





Determine which letter best represents the missing fact from the fact family.

Answers

1) $8 \times 6 = 48$
 $6 \times 8 = 48$
 $48 \div 6 = 8$

 ?

- A. $6 + 8 = 48$
- B. $48 \div 8 = 6$
- C. $7 \times 8 = 56$
- D. $8 \times 48 = 6$

2) $6 \times 1 = 6$
 $6 \div 6 = 1$
 $1 \times 6 = 6$

 ?

- A. $6 \div 7 = 1$
- B. $6 \times 6 = 1$
- C. $1 + 6 = 7$
- D. $6 \div 1 = 6$

3) $20 \div 10 = 2$
 $2 \times 10 = 20$
 $20 \div 2 = 10$

 ?

- A. $10 + 2 = 12$
- B. $20 \div 3 = 10$
- C. $11 \times 2 = 22$
- D. $10 \times 2 = 20$

4) $6 \times 3 = 18$
 $3 \times 6 = 18$
 $18 \div 3 = 6$

 ?

- A. $18 \div 6 = 3$
- B. $6 + 3 = 9$
- C. $6 + 3 = 18$
- D. $7 \times 3 = 21$

5) $6 \times 5 = 30$
 $5 \times 6 = 30$
 $30 \div 6 = 5$

 ?

- A. $6 \times 6 = 36$
- B. $30 \div 5 = 6$
- C. $5 + 6 = 30$
- D. $6 \times 30 = 5$

6) $5 \times 1 = 5$
 $5 \div 5 = 1$
 $1 \times 5 = 5$

 ?

- A. $5 - 5 = 0$
- B. $1 + 5 = 5$
- C. $5 \div 1 = 5$
- D. $5 \div 6 = 1$

7) $6 \div 2 = 3$
 $2 \times 3 = 6$
 $3 \times 2 = 6$

 ?

- A. $6 \div 3 = 2$
- B. $6 \div 4 = 2$
- C. $2 + 3 = 5$
- D. $2 + 3 = 6$

8) $7 \times 3 = 21$
 $3 \times 7 = 21$
 $21 \div 7 = 3$

 ?

- A. $8 \times 3 = 24$
- B. $7 + 3 = 21$
- C. $7 + 3 = 10$
- D. $21 \div 3 = 7$

9) $2 \div 2 = 1$
 $1 \times 2 = 2$
 $2 \times 1 = 2$

 ?

- A. $2 \times 2 = 4$
- B. $2 \times 2 = 1$
- C. $2 \div 1 = 2$
- D. $2 - 2 = 0$

10) $3 \times 8 = 24$
 $8 \times 3 = 24$
 $24 \div 3 = 8$

 ?

- A. $24 \div 8 = 3$
- B. $9 \times 3 = 27$
- C. $8 + 3 = 24$
- D. $24 \div 4 = 8$

11) $10 \times 4 = 40$
 $40 \div 10 = 4$
 $4 \times 10 = 40$

 ?

- A. $4 \times 40 = 10$
- B. $10 + 4 = 40$
- C. $40 \div 4 = 10$
- D. $40 \div 5 = 10$

12) $15 \div 3 = 5$
 $15 \div 5 = 3$
 $3 \times 5 = 15$

 ?

- A. $5 + 3 = 15$
- B. $5 \times 3 = 15$
- C. $6 \times 3 = 18$
- D. $15 - 3 = 12$

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

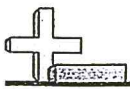
8. _____

9. _____

10. _____

11. _____

12. _____



Use the numberlines to round each number to the nearest 100.

Ex) 483



Answers

Ex. 500

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

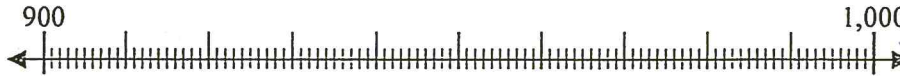
7. _____

8. _____

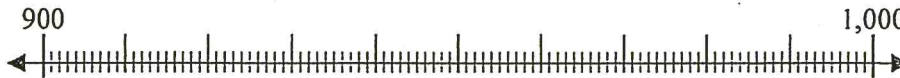
9. _____

10. _____

1) 922



2) 951



3) 208



4) 446



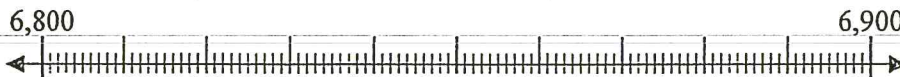
5) 2,038



6) 1,905



7) 6,849



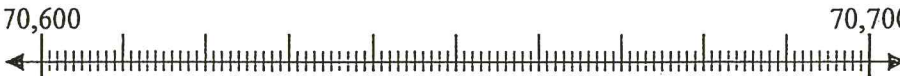
8) 2,489

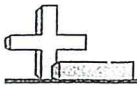


9) 90,408



10) 70,628

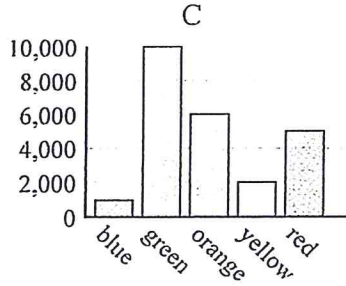
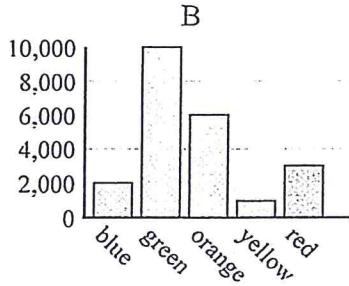
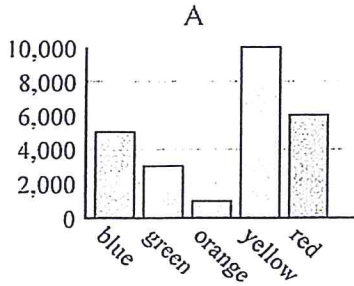




Determine which graph (A,B or C) best represents the information in the table.

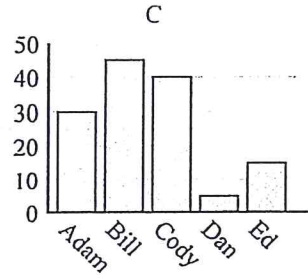
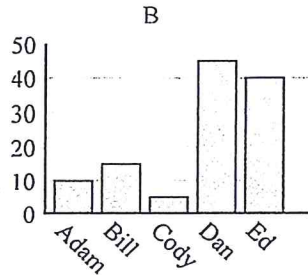
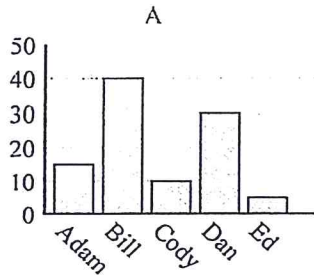
Answers

Favorite Color	blue	green	orange	yellow	red
People	1,000	10,000	6,000	2,000	5,000

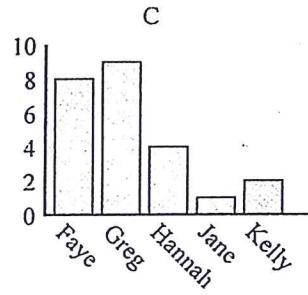
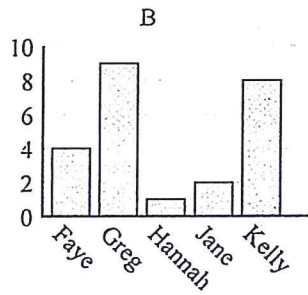
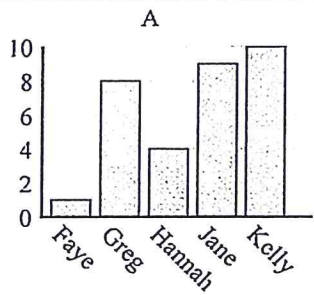


1. _____
2. _____
3. _____
4. _____

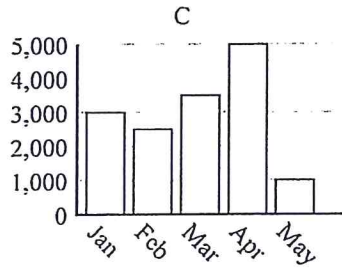
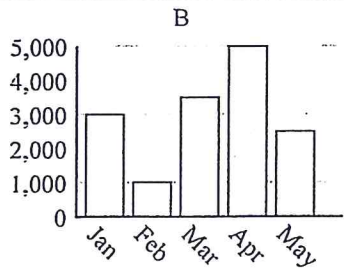
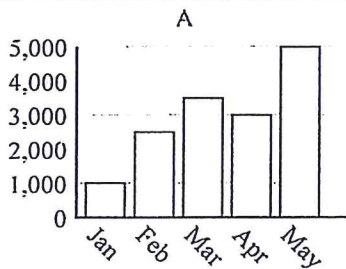
Name	Adam	Bill	Cody	Dan	Ed
Points	30	45	40	5	15

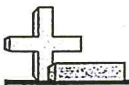


Name	Faye	Greg	Hannah	Jane	Kelly
States Lived In	1	8	4	9	10

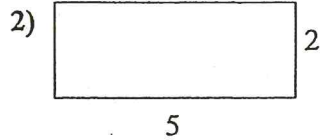
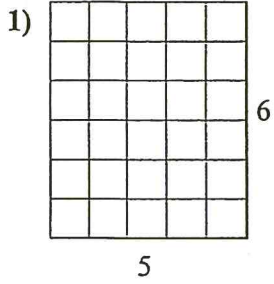


Sales	Jan	Feb	Mar	Apr	May
Month	1,000	2,500	3,500	3,000	5,000

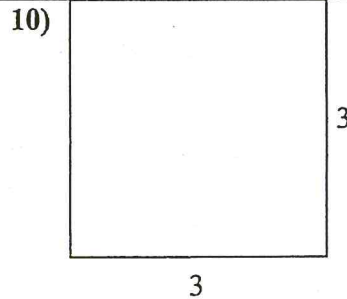
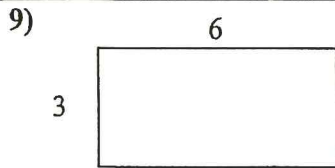
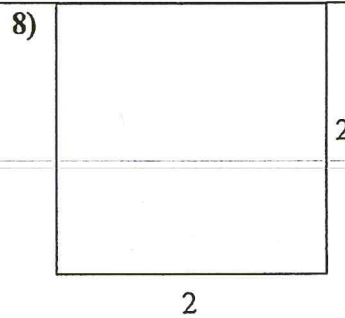
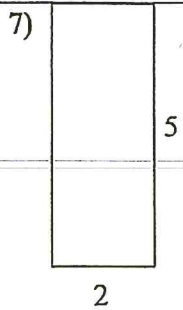
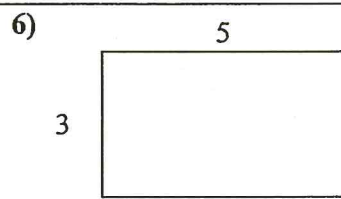
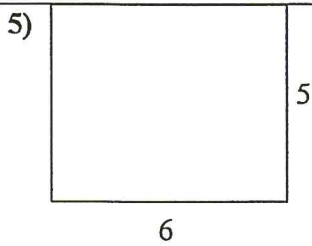
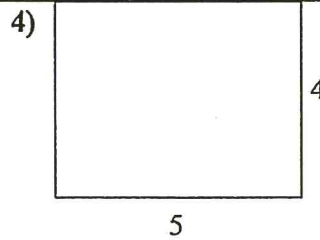
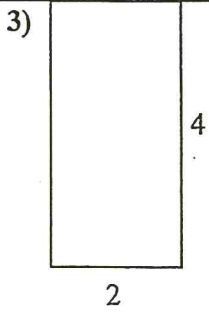




Find the area (in u) by tiling the rectangles shown. The first is tiled for you.

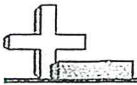


Area = Length X width
 $A = 5 \times 6$



Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____



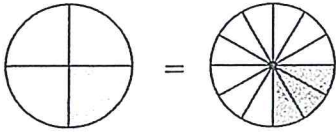
Finding Equivalent Fractions

Name: _____

Shade in the visual fraction to find the equivalent fraction.

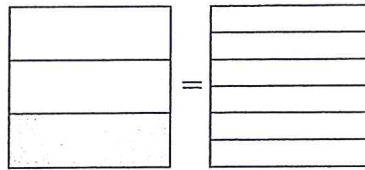
Ex)

$$\frac{1}{4} = \frac{3}{12}$$



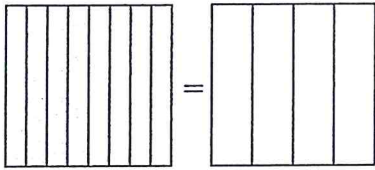
1)

$$\frac{1}{3} =$$



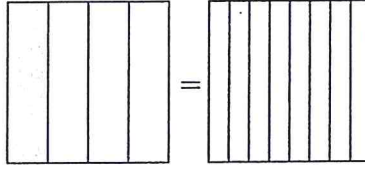
2)

$$\frac{4}{8} =$$



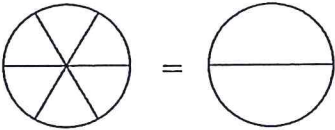
3)

$$\frac{1}{4} =$$



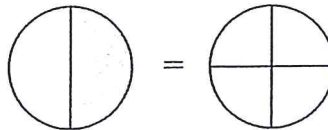
4)

$$\frac{0}{6} =$$



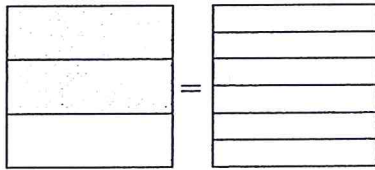
5)

$$\frac{1}{2} =$$



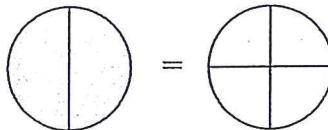
6)

$$\frac{2}{3} =$$



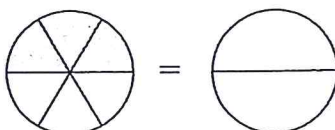
7)

$$\frac{2}{2} =$$



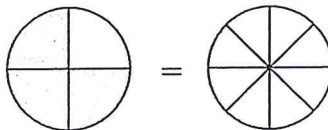
8)

$$\frac{3}{6} =$$



9)

$$\frac{3}{4} =$$



Answers

Ex. $\frac{3}{12}$

1. _____

2. _____

3. _____

4. _____

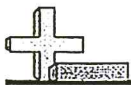
5. _____

6. _____

7. _____

8. _____

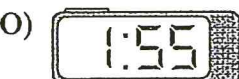
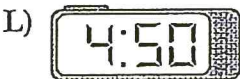
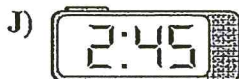
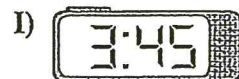
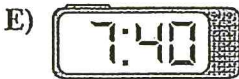
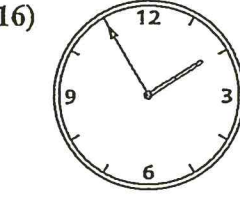
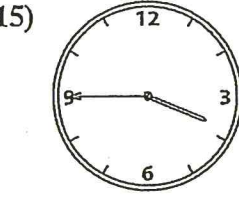
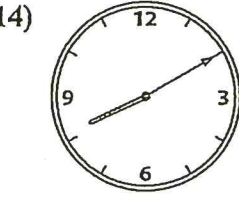
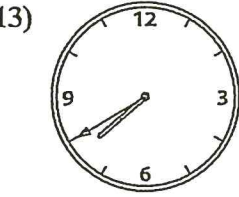
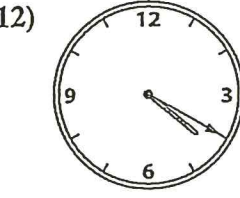
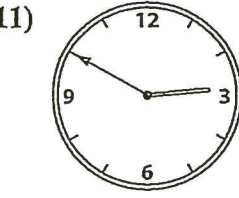
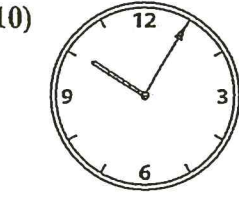
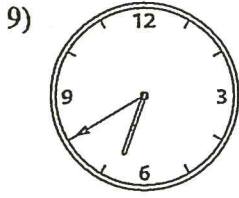
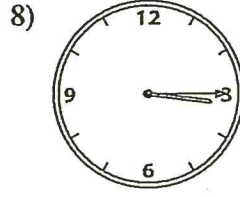
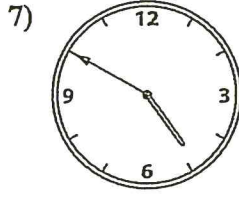
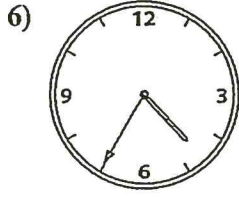
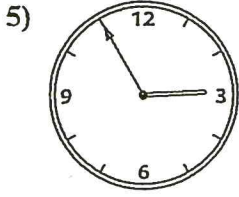
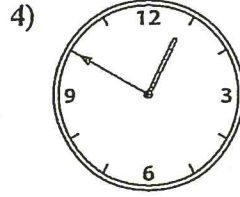
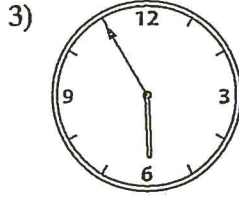
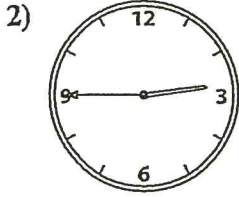
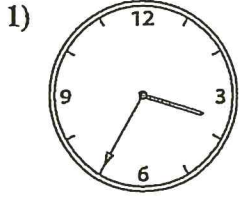
9. _____



Matching Clocks

Name: _____

Match the analog clock on the top to the digital clock on the bottom.



Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____