THINK SCHOOL

Little Minds, revolutionary learning

SUMMER ASSIGNMENT

MUST BE SUBMITTED BY:
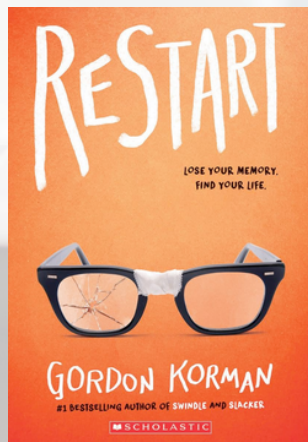## THE FIRST FRIDAY OF SCHOOL

STUDENT NAME: _____

FOR STUDENTS ENTERING FIFTH GRADE

MANDATORY SUMMER READING ASSIGNMENT

All students entering Grade 5 are required to read the following assigned book and complete a book report project - a 2-page book report, in essay format.

Assigned Book For Grade 5:
Restart
https://a.co/d/0302I9Pt

Tips on Writing a Book Report

FOR GRADES 4-5

Always include the following elements in any book report:
- the title & author of the book
- the setting (time & place) of the book
- the names and a brief description of each main character
- quotations and examples from the book to support your opinions

A Plot Summary
When you are writing a plot summary for your book report you don't want to simply retell the story. You want to explain the plot and what your opinion on it is. Make sure that you use plenty of examples from the book to support this summary and your opinions. Try starting the report with a sentence similar to:

The plot of I Married a Sea Captain, by Monica Hubbard, is interesting because it gives the reader a sense of being a wife during the 19th century.

A Character Analysis
You should write briefly about physical and personality traits of different characters and the way their actions affect the plot of the book.
- Explore the way a character dresses and why.
- What positive characteristics does the character have?
- Does the character have a flaw that gets him/her into trouble frequently?
- Finally, tie all of your observations together by explaining the way the characters make the plot move forward.

You can start this section of your book report like:

In the novel Charlotte's Web, by E. B. White, Templeton the rat may seem like an unnecessary character but his constant quest for food moves the plot forward.

Themes

Exploring the themes (or big ideas that run throughout the story) in a book can be a great way to make your book report even better! Try bringing some of your thoughts and feelings as a reader into the report as a way to show the power of a theme. Before you discuss your own thoughts, however, be sure to establish what the theme is and how it appears in the story.

- Explain exactly what theme you will be exploring in your book report.
- Use as many examples and quotations from the book as possible to prove that the theme is important to the story.
- After you have established the theme and thoroughly examined the way it affects the book, include a few sentences about the impact the theme had upon you and why it made the book more or less enjoyable to read.

Try starting this part with a sentence similar to the following:

In the novel The Wizard of Oz, by L. Frank Baum, the theme of friendship and inner strengths helps the reader understand the characters better.

Your book report should be at least 2 pages, typed, and printed. Be sure to check the writing structure and grammar to the best of your ability!

Each book report must also include an illustrated cover created by the student!

LITERACY & LANGCOM

GRAMMAR

The following section provides sets of 4 sentences. Read each group of four sentences to find the one that contains an error. Circle which one is wrong.

Part 1: Fragments, Comma Splices, Fused Sentences

1. A. His final exam was returned.
    B. Because she never fully realized how important a physical exam could be.
    C. Two hours before the performance, he was nervous.
    D. After she had made a list of the cleaning supplies which she needed, she left for the store.

2. A. There are two conditions for accepting Harrington as the nominee.
    B. The woman who had been our family dentist for many years.
    C. Since she had access to the key and had been seen in the neighborhood, she was arrested.
    D. I enjoy chocolate cake, especially when it is topped with ice cream.

3. A. Besides being a loving mother, she is a loyal friend.
    B. Finally, I woke up.
    C. He had wanted to see a rodeo before he left Texas.
    D. Knowing that her money was limited.

4. A. If there is a crisis, call the nurse immediately.
    B. Make your choice based on the job you really want.
    C. Since any choice may or may not be the "right" choice.
    D. Hoping the answer was the correct one, Bob hesitantly marked A on the test.

5. A. Knowing what to buy for a campsite is vital.
    B. Talking too little can be more of a problem than talking too much.
    C. Rob often goes hiking for several weeks, climbing higher into the mountains each day.
    D. Although some items are not for the body but for the soul.

Choose the answer option that identifies the underlined word or words in the sentence.

1. He will visit his grandparents for two weeks this summer.
a. adverb
b. conjunction
c. noun
d. pronoun

2. Silently read your book.
a. adjective
b. adverb
c. preposition
d. verb

3. Hey! Put that down!
a. adjective
b. adverb
c. interjection
d. noun

4. Liam brought his notebook to class.
a. adverb
b. conjunction
c. noun
d. pronoun

5. Your test scores were almost perfect.
a. adjective
b. adverb
c. noun
d. pronoun

6. Please join us for the birthday party this afternoon.
a. conjunction
b. interjection
c. pronoun
d. verb

7. French onion soup is on the lunch menu.
a. adjective
b. adverb
c. conjunction
d. noun

8. The coach jumped for joy.
a. adjective
b. conjunction
c. preposition
d. verb

9. Classes will resume in the fall.
a. noun
b. preposition
c. pronoun
d. verb

10. I understand the directions.
a. interjection
b. noun
c. preposition
d. verb

11. Fathers and sons enjoy taking long fishing trips to the lake.
a. adverb
b. conjunction
c. noun
d. preposition

12. The postman will deliver it to your house.
a. conjunction
b. interjection
c. pronoun
d. verb

13. She wore a beautiful dress to the party.
a. adjective
b. adverb
c. interjection
d. noun

14. Wow! That was scary.
a. interjection
b. noun
c. preposition
d. verb

COMMAS AND SEMICOLONS

Commas are used in lists,

We need eggs, milk, butter, and sugar to make the cookies.

to break up long sentences,

But, since I had forgotten to bring my lunch with me, and since my sister didn't have any money to lend me, I had to call my Dad and ask him to bring it to school.

after quotes,

"Let's take a break from homework and get a snack," my mom suggested.

and to break up quotes.

"Hey," she said, " That roller coaster wasn't so scary after all!"

Semicolons are used in place of conjunctions

I exercise three days a week because it helps me stay in shape. I exercise three days a week; it helps me stay in shape.

We went to the movies but they were closed.

We went to the movies; they were closed.

or to combine short sentences that are related to one another.

My aunt loves to cook; she makes dinner for us every week.

Directions: Figure out whether these sentences need commas or semicolons. Write them into each sentence.

1. "Remember it's your turn to do the dishes " said my dad.

2. I like pepperoni olives and mushrooms on my pizza.

3. I didn't need braces like my sister I have very straight teeth.

4. Our dog has short legs and a long body he is part dachshund.

5. We were told the test was canceled we all cheered.

Your turn!   Write two sentences, one using a comma and the other using a semicolon.

_____

_____

_____

_____

PERSON

Jesse was asked to write an article from the first person, second person, and third person perspectives. When he was done, he forgot which one was which.

DIRECTIONS: Please help Jesse by writing first, second, or third by the correct version of each story.

REMEMBER: First person is when a character narrates the story with I, me, my, mine in his or her speech.

Second person is when the author uses the words you and your. S/he is talking directly to the reader.

Third person is when the reader is an outsider that is able to see the thoughts of everyone in the book. Most writers choose this point of view.

---

1 As you walk up the hill, you realize that it's just too quiet. There's no sound from the bird you know is almost always singing from the top of the maple tree. You think you see a shadow move high up on the slope, but when you look again it's gone. You get goose bumps on your arms.

----

2 As I walked up the hill, I realized that it was just too quiet. There was no sound from the bird who was almost always singing from the top of the maple tree. I thought I saw a shadow move high up on the slope, but when I looked again it was gone. I felt goose bumps pop up on my arms.

----

3 As she walked up the hill, she realized that it was just too quiet. There was no sound from the bird who she so often heard singing from the top of the maple tree. She thought she saw a shadow move high up on the slope, but when she looked again it was gone. She felt goose bumps pop up on my arms.

A **MAIN CLAUSE** is the main point that you are trying to get across in a sentence. It is a complete sentence that can be stated on its own. A **SUBORDINATE CLAUSE** is the additional information in a sentence. It is usually a fragment, or an incomplete sentence, that doesn't make sense on its own.

Directions: Double underline the main clause (MC) and single underline the subordinate clause (SC) in each sentence below.

1. When my father arrives, he will give the directions.

2. The president will give a speech when he arrives in town.

3. According to the news, the election will be next week.

4. Because my alarm clock broke, I was late to school.

SUBORDINATE CLAUSES are typically one of the following categories:

CONCESSIVE: Concessive clauses are used to admit a point in an argument, like when you're trying to admit that something is true or valid after first denying or resisting it. Terms commonly used: though, although, even though, while, even if

Example: I tried hard to complete the task, though it seemed impossible.

TIME & PLACE: Time and Place clauses are used to add info about the setting of the sentence.

Example: I had difficulties with English grammar when I was a child.
Example: I will never forget Seattle where I spent so many wonderful summers.

SIMILE: Simile clauses are used to add interest and expression to a sentence.

Example: I ran fast like a cheetah.

REASONING: Reasoning clauses are used to explain or provide reason to the main clause of the sentence.

Example: I was late to school because my alarm clock didn't go off.

<u>Assignment</u>: Write your own sentences with a main and subordinate clause. Each sentence should have both a main and subordinate clause. Underline the subordinate clause in each sentence. Write two sentences for each type of subordinate clause.

CONCESSIVE:

TIME & PLACE:

SIMILE:

REASONING:

WRITING STRUCTURE

Write a 5-paragraph essay answering the following question:
How would understanding and applying main and subordinate clauses help write better and more details and structured essays? Provide details.

_____

_____

_____

_____

_____

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_____

_____

_____

_____

_____

READING COMPREHENSION

NEST WATCH

Rainey loved nature. She loved nature in her big, overgrown backyard. Her parents wanted their yard to be a safe place for native plants and species. They only mowed a small area. They left the rest to grow wild, so that rabbits, squirrels, moles, and every kind of native bird imaginable would inhabit their yard. Her favorite sight was the songbirds that flitted in the trees and bushes and surrounded her home with their nests.

There were bright red cardinals with their light pink mates. She saw puffed up chickadees, bluebirds with pink tummies, and plump brown robins with dark red chests. Goldfinches, red-winged blackbirds, and an occasional woodpecker appeared at the numerous feeders.

Rainey's mother was a painter. Her dad was a professor of ornithology, the study of birds. Together, they'd traveled, studying and painting rare birds across the globe. Rainey's favorite birds were in her little backyard wilderness.

"Rainey! Grab your binoculars," her father called one afternoon. "It looks like goldfinches are settling into the holly tree by our back porch. I would have thought they'd pick a more isolated spot. Their choice is our boon. We can observe them at close range!"

"Goldfinches prefer open woodlands, Dad. Why would they build so close to human houses?"

"We do have plenty of seeds in our feeders. Your mother has quite the garden.

Goldfinches are strict vegetarians. They only eat seeds. They won't eat worms and insects. Maybe our home seemed like a good food source," her father shrugged. He put the binoculars up to his face and adjusted them to zoom in on the goldfinch nest. "Even though the nest is close to our home, we shouldn't approach it. We need to stay back so the mother doesn't abandon the nest."

"Are there any eggs in the nest yet?"

"There will be soon. Goldfinches build a nest in stages. The last stage is lining it with soft, downy seed fluff and plant fibers or any other soft materials they can find.

Oh, look! Here comes Mama Finch! In her beak, what do you see?"

Rainey observed, "Ooh, she has a bunch of soft gray fluff from a seed pod! That means the nest will have eggs in it soon!"

Sure enough, about three days later, the nest had eggs in it. Rainey couldn't wait

for them to hatch! "Dad, how soon will the eggs hatch? I know chickens take 21 days to hatch once their eggs are laid, but what about goldfinches?"

"You might see an egg hatch between 12 and 14 days after the mother lays them. Let's mark up the calendars. We'll circle those days. Then, we'll have a Nest Watch and see when they hatch!"

Directions: Use evidence from the text to find the correct answer. Then, circle the correct answer.

1. Which type of bird is NOT mentioned in the passage?

   A crows
   B cardinals
   C goldfinches
   D chickadees

2. How long does the text say it takes chicken eggs to hatch?

   A 12-14 days

   B 10-11 days
   C 21 days
   D 32 days

3. The title "Nest Watch" could let readers predict many things about a text before reading. Which inference most clearly matches what happened in the text?

   A There will be an animal or bird that is raising babies.
   B Someone will find a watch in a bird's nest.
   C There are birdwatchers who want to monitor a bird's nest.
   D Both A and C are good choices.

4. Use specific information from the text to describe the goldfinch chicks.

   A They have gold and black feathers.

   B They are tiny and and pink.
   C They are covered in soft gray down.
   D They are solid white and with pink beaks.

5. Use information and inferences to answer the question: Why did Rainey think it would be safe to sneak a peek at the nest?

   A She didn't plan to touch it.

   B She didn't believe her dad was right about needing to leave the nest alone.

   C She wouldn't harm the babies.
   D All of the above

6. Where was the nest in the story?

   A in the woods
   B by the back porch
   C in an oak tree
   D on a tropical island

7. How were Rainey and her dad watching the nest?

   A with a telescope

   B sneaking up on the nest
   C using binoculars
   D use magnifying glasses

8. How did Rainey know the eggs had hatched?

   A She heard the baby birds chirping.

   B She saw the eggs cracking.
   C She got on a ladder and looked in the nest.
   D Her dad told her.

9. What can we infer from Rainey's thought that it was time to watch nature from a distance?

   A She learned to put the needs of herself first.
   B She's respecting the rules to keep the mother bird from laying more eggs.

   C She's afraid to go near the birds because they might peck her.
   D She learned to put the needs of creatures first.

10. What does Rainey's mother do for a living?

   A She's a professor of ornithology.

   B She is a painter.
   C She is a gardener.
   D She is a stay-at-home mother.

Directions: Use evidence from the text to write a written response in complete sentences.

1.What is one fact that you learned about goldfinches from this passage? Use specific quotes or information from the text.

_____

_____

_____

_____

2.What did Rainey's dad say would happen if humans got near the nest? Use specific quotes or information from the text.

_____

_____

_____

_____

3. Use specific information from the text to prove that Rainey liked local wildlife better than any other kind of animal.

_____

_____

_____

_____

4. Find specific information from the text to prove that Rainey is knowledgeable about birds.

_____

_____

_____

_____

5. What does Rainey realize when she sees the mother and father birds with their babies?

_____

_____

_____

_____

MAKING INFERENCES

Use what you already know and what the story says to make inferences:

The Hare and the Tortoise

The beasts of the forest had long argued about who was the fastest—the Hare or the Tortoise. So a race was arranged. "I welcome this contest," the Tortoise said. The Hare was harder to convince. "This is ridiculous nonsense," he said. But finally he agreed.

Race day arrived, and the Tortoise started down the path. "Run hard!" shouted the Tortoise's fans. The Hare stood looking down the path. "Ridiculous nonsense," he muttered, and then he dashed off down the path. "Run hard!" shouted the Hare's fans. The Hare ran for a while and then stopped. He looked around, but the Tortoise was nowhere in sight. The Hare sat down and scratched himself. "Run hard!" shouted the Hare's fans. "Let him rest!" shouted the others.

When the Hare saw the Tortoise coming, he got up and ran for a while more. Then he sat down and scratched himself. This went on until the Hare was almost to the finish line where all the animals of the forest were gathered. Suddenly, it struck him how foolish he looked running a race with a Tortoise who was nowhere in sight. He sat down again. Some say he slept. The Tortoise won, and all the animals cheered. "How did you do it?" someone asked. "Slow and steady wins the race," the Tortoise replied. And that is the moral of this story. It also became a popular saying among all the animals, and especially among the snails.

1. Why did the Hare say the race was "ridiculous nonsense"?

A. The Hare did not want to be embarrassed if he lost the race.
B. The Hare knew that he could run much faster than the Tortoise.
C. The Hare was angry at the other animals of the forest.

2. When the Hare turned around, why didn't he see the Tortoise behind him?

A. The Tortoise was on a different path.

B. The Tortoise had sat down to rest.

C. The Hare was very far ahead of the Tortoise.

3. Why did the Hare keep sitting down during the race?

A. The Hare still thought the race was ridiculous.

B. The Hare could only run for short distances.

C. The Hare wanted the Tortoise to win the race.

Why didn't the Hare jump up and run when the Tortoise approached the finish line?
A. The Hare was probably asleep, and didn't see the Tortoise.
B. The Hare made a wrong turn, and the Tortoise went the right way.
C. The Tortoise went so slowly that the Hare didn't see him.

Think about what makes the most sense, to draw a conclusion:

The Tortoise won, and all the animals cheered. "How did you do it?" someone asked. "Slow and steady wins the race," the Tortoise replied. And that is the moral of this story. It also became a popular saying among all the animals, and especially among the Snails.

5. This is probably because:
A. The Snails and the Tortoise were good friends.
B. The Snails liked the saying, because Snails are also very slow.
C. The Snails were smarter than the other beasts of the forest.

Draw another conclusion: What lesson is this story meant to teach?

_____

_____

_____

_____

Seasons on the Prairie

The prairie is a place where plants have lived for hundreds of years. If you see a natural prairie in different seasons, you see bright flowers and tall grasses. In early spring you see shooting stars and violets, and the spring grasses begin to grow. The prairie is very wet then since winter snows melt and leave ponds. There are two kinds of prairie grasses, one that grows a lot in spring, another that grows a lot in summer.

In summer the grasses are so tall you can't see low-growing flowers, but you do see the tall black-eyed Susan. Summer was the prairie's biggest season. In summer, there was so much tall grass that people called it a sea of grass that grew as tall as people. When pioneers were in the prairie, sometimes they got lost and would use a very tall plant called the compass plant to find their way. The compass plant's leaves turned during the day to follow the sunlight. Thousands of animals lived in this grassy area, including bison that grazed on the plants.

In autumn, more flowers bloom—the asters brighten the prairie. The leaves of many prairie plants turn gold in autumn as the grasses dry. In autumn, when the grasses are dry, natural fires take place. Those fires start by lightning. Acres and acres of prairie can burn in one natural fire. When the grasses burn, the native prairie plants do not die. In fact, the fires help the grasses keep the prairie for themselves. Most plants, especially trees, depend on their tips to grow. You'll see that trees have new buds in spring, and that is where they grow. If a tree loses its branches, it will not grow again. But grasses do not need their leave to grow back. They grow from their roots, and the fires do not burn those roots. So every year, the lightning fires are like gardeners weeding the prairie of plants that do not grow there. The prairie plants were like gardeners, too, because as their leaves died they fertilized the soil.

Some prairie animals migrate in winter to warmer places where they will find food. Some stay in the prairie through winter. And some hibernate. For example, some frogs dig holes under the ground and sleep through the cold prairie winter. Thousands of bison and hundreds of birds and other animals that used to live in this area are gone, but they did not migrate. They left because their habitat was destroyed. There is hope for the prairie, those animals will be able to live in this area again. People are restoring the prairie at Midewin National Tallgrass prairie. One day that area will look as it did when the bison lived there and the Potawatomi hunted here.

READ CLOSELY
What do you think the main idea is of this passage? Underline or list five facts that support it.

THINK MORE
Illustrate the passage. Draw pictures that show what each paragraph explains.

THINK CLEARLY
The following page includes multiple choice questions based on this reading. Answer the questions. As you answer each one, put the number of that question with the evidence that supports your answer.

Seasons on the Prairie

Reading Comprehension

Read the questions. Re-read the text. Then think through the answers. Choose the best answer for each item. After you answer the questions, check with another student to learn and why they chose their answers.

1. When do violets bloom in the prairie?
a. winter   b. spring   c. summer   d. autumn

2. Why did pioneers call one plant the compass plant?
a. it had pointed leaves   b. its leaves followed the sun
c. its leaves pointed a direction   d. it has four leaves

3. What would you see a frog doing at the end of winter?
a. hibernating   b. eating plants
c. leaving its winter home   d. returning from the south

4. How is a prairie like a rainforest?
a. It is warm much of the time.   b. There are many trees.
c. Much of it has been destroyed.   d. There are fires every year.

5. Why are there two kinds of grasses in prairies?
a. One is short, one is tall.   b. They grow more in different seasons.
c. People planted new grass.   d. The fires burn one kind.

6. What keeps trees from growing in the prairie?
a. There is not enough rain.   b. There is too much grass.
c. There are too many fires.   d. There is too much corn.

7. If you were looking for a bison, in which season would you see it in a prairie?
a. winter   b. spring   c. summer   d. never

8. Which of these is the most important part of the prairie?
a. fires   b. black-eyed Susans   c. bison   d. birds

MATHEMATICS

Least Common Multiple
[smallest]   [same]   [multiple]

*a multiple is a number that can be divided by another number without a remainder. It is the answer to a number being multiplied by another. The numbers that multiply by each other are the factors

Greatest Common Factor
[biggest]   [same]   [factor]

*a factor is a number that is multiplied by another number to equal a multiple

$$3 \times 5 = 15$$

factors   multiple

Example:
Find the LCM of 4 and 5.

You start by making a table for each number. Stop at multiplying each factor by the other factor in the set. Meaning, for multiples of 4, stop at x5 and for multiples of 5, stop at x4. The LCM can be what both factors equal to when multiplied, but never more than that.

	x1	x2	x3	x4	x5
4	4	8	12	16	20
5	5	10	15	20	
	x1	x2	x3	x4	

Example:
Find the GCF of 18 and 30.

You start by making a table for each number. Start with 1 and go in order. 1 x ? = each multiple? Leave some space in between each factor pair. 1 and 18; 2 and 9, 3 and 6. Now that you see two factors very close to each other in value, like 3 and 6, you can ask yourself: "the only numbers between 3 and 6 are 4 and 5. are those factors of this multiple? If no, then you're done finding factors for that number. You'll see that multiples may have more than one common factor, but don't forget that you're looking for he biggest one!

18	1, 2, 3, 6, 9, 18
30	1, 2, 3, 5, 6, 10, 15, 30

Find the Least Common Multiple and Greatest Common Factor for each set of numbers. Show all work on a separate piece of paper.

	LCM	**GCF**
16, 10	_____	_____
14, 6	_____	_____
3, 27	_____	_____
6, 14	_____	_____
16, 5	_____	_____
8, 12	_____	_____
16, 6	_____	_____
8, 3	_____	_____

OPERATIONS REVIEW

Multiply and Divide

① 323
× 232

② 802
× 917

③ 652
× 312

④ 541
× 434

⑤ 462
× 578

⑥ 659
× 728

⑦ 604
× 350

⑧ 702
× 198

⑨ 21)5502

⑩ 32)7392

⑪ 24)3648

⑫ 25)5575

⑬ 25)5350

⑭ 40)3740

⑮ 18)3618

⑯ 19)5016

GEOMETRY
AREA/PERIMETER OF IRREGULAR SHAPES

To find the area of an irregular shape made of two or more rectangles, cut the shape into two or more parts and add the area of each part.

3 m
4 m
7 m
2 m
3 m
5 m
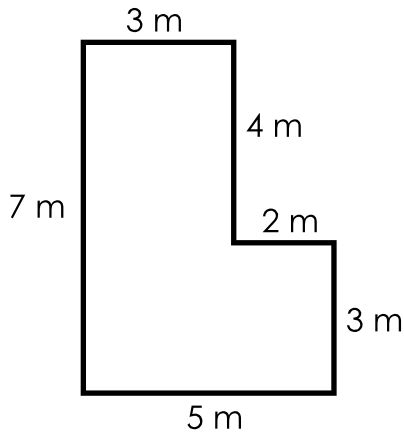
Area of Rectangle 1:
$A = l \times w$
$A = 4 \times 3$
$A = 12 \ m^2$

Area of Rectangle 2:
$A = l \times w$
$A = 5 \times 3$
$A = 15 \ m^2$

Total Area:
$A = 12 \ m^2 + 15 \ m^2$
$A = 27 \ m^2$

3 m
4 m
7 m
2 m
3 m
5 m
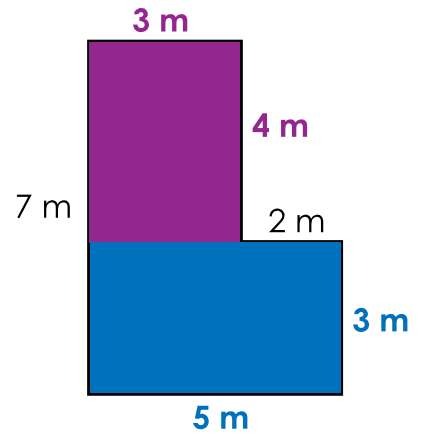
Find the area of each shape. Include units in your answer.

1.

10 cm
5 cm
8 cm
6 cm
3 cm
4 cm

2.

4 mm   4 mm
3 mm   3 mm
6 mm   4 mm   6 mm
12 mm

3.

1 m
4 m   4 m
4 m   4 m
5 m   5 m
9 m

4.

3 cm
4 cm
2 cm   3 cm
5 cm   2 cm   6 cm
9 cm
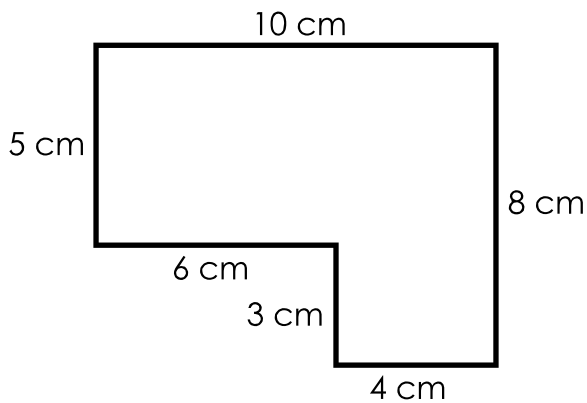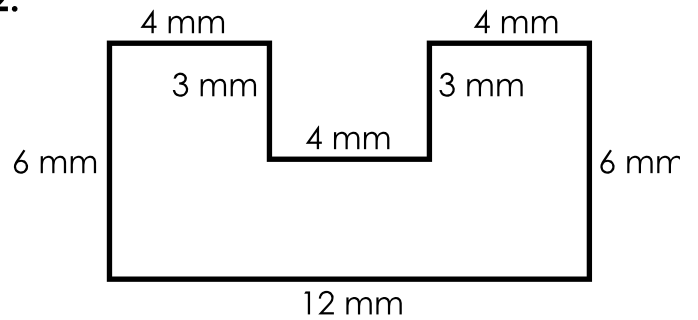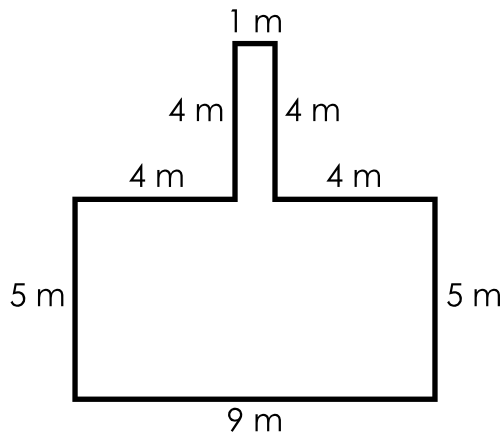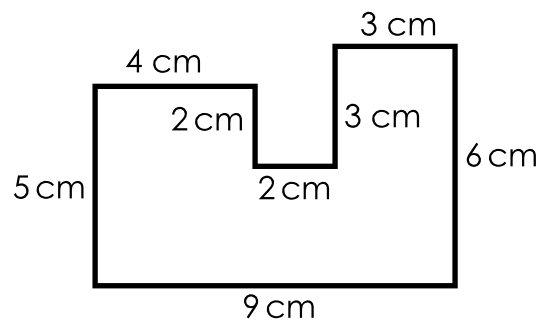
Find the area and perimeter of each shape. Show all work on a separate sheet of paper.
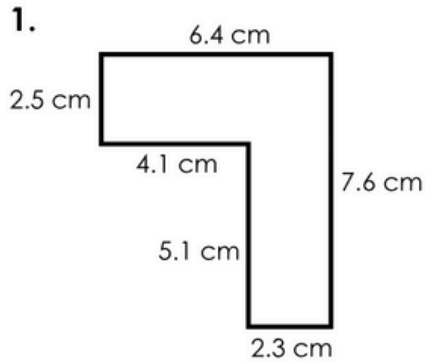
1.

6.4 cm
2.5 cm
4.1 cm
7.6 cm
5.1 cm
2.3 cm

Perimeter: _____
Area: _____

2.

10.8 m
5.3 m
8.4 m
7.3 m
3.1 m
3.5 m

Perimeter: _____
Area: _____

3.

4.5 mm
7.4 mm
5.4 mm
12.7 mm
5.3 mm
9.9 mm

Perimeter: _____
Area: _____

4.

9.7 mm
3.2 mm
5.6 mm
4.3 mm
5.6 mm
13.7 mm
6.2 mm
9.7 mm

Perimeter: _____
Area: _____

5.

6 cm
7.9 cm
5.2 cm
11.6 cm
4.1 cm
8.6 cm
7.8 cm
19.8 cm

Perimeter: _____
Area: _____

6.

4.3 m
3.2 m
9.6 m
4.3 m
3.2 m
4.3 m
3.2 m
12.9 m
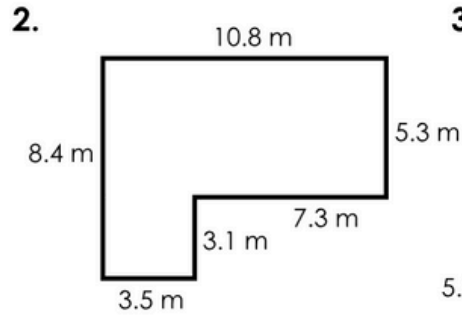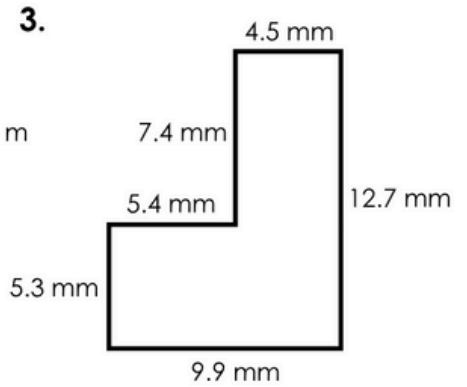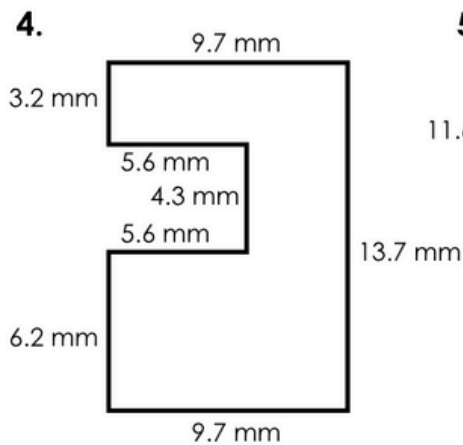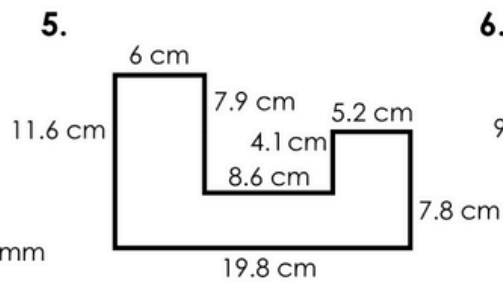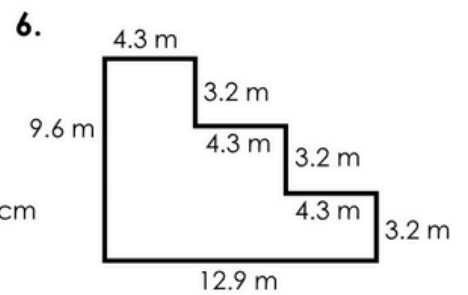
Perimeter: _____
Area: _____

Simplifying Fractions

Example: $\dfrac{24}{36}$

STEP 1:
Find the GCF of the numerator and the denominator.

24: 1, 2, 3, 4, 6, 8, **12**, 24
36: 1, 2, 3, 4, 6, 9, **12**, 18, 36   **Your GCF is 12**

STEP 2:
Divide the numerator and denominator by the GCF and that's your simplified fraction!

$\dfrac{24 \div 12}{36 \div 12} = \left(\dfrac{2}{3}\right)$ **your answer! YAY!**

Converting Improper Fractions and mixed numbers

Improper Fraction to Mixed Number

Example: $\dfrac{39}{6}$

STEP 1:
Divide the numerator by the denominator.

$\dfrac{39}{6}$ $39 \div 6 = 6$ with a remainder of 3

STEP 2:
6 becomes your whole number and the remainder is placed over the original denominator.

$6\dfrac{3}{6}$

Mixed Number to Improper Fraction

Example: $5\dfrac{6}{7}$

STEP 1:
Multiply the whole number by the denominator.

$5\dfrac{6}{7}$ $5 \times 7 = 35$

STEP 2:
Add the numerator to the sum from step 1, and put the total over the original denominator.

$35 + 6 = 41$ $\dfrac{41}{7}$

Adding/Subtracting Fractions with
UNLIKE DENOMINATORS

Example: $\dfrac{2}{4} + \dfrac{6}{7} =$

STEP 1:

Find the LCM of the denominators.

4: 4, 8, 12, 16, 20, 24, **28**
7: 7, 14, 21, **28**

Your LCM is 28

STEP 2:

Put both original fractions over the LCM as the denominator.

how do you multiply to get from 4 to 28 and 7 to 28? multiply 4 by 7 and 7 by 4.

Don't forget: whatever you do to the bottom, you do to the top (and vice versa!)

$2 \times 7 = 14$

$\dfrac{2}{4} \genfrac{}{}{0pt}{}{\text{x7}}{\text{x7}} \dfrac{X}{28} = \dfrac{\mathbf{14}}{\mathbf{28}}$

$6 \times 4 = 24$

$\dfrac{6}{7} \genfrac{}{}{0pt}{}{\text{x4}}{\text{x4}} \dfrac{X}{28} = \dfrac{\mathbf{24}}{\mathbf{28}}$

your new fractions

STEP 3:

Add the numerators of the two new fractions and put it over the denominator from step 2.

$\dfrac{14}{28} + \dfrac{24}{28} = \dfrac{38}{28}$

your answer! YAY!

Example: $\dfrac{5}{7} + \dfrac{2}{5} =$

STEP 1:

Find the LCM of the denominators.

5: 5, 10, 15, 20, 25, 30, **35**
7: 7, 14, 21, 28, **35**

Your LCM is 35

STEP 2:

Put both original fractions over the LCM as the denominator.

how do you multiply to get from 7 to 35 and 5 to 35? multiply 7 by 5 and 5 by 7.

Don't forget: whatever you do to the bottom, you do to the top (and vice versa!)

$5 \times 5 = 25$

$\dfrac{5}{7} \genfrac{}{}{0pt}{}{\text{x5}}{\text{x5}} \dfrac{X}{35} = \dfrac{\mathbf{25}}{\mathbf{28}}$

$2 \times 7 = 14$

$\dfrac{2}{5} \genfrac{}{}{0pt}{}{\text{x7}}{\text{x7}} \dfrac{X}{35} = \dfrac{\mathbf{14}}{\mathbf{28}}$

STEP 3:

Subtract the numerators of the two new fractions and put it over the denominator from step 2.

$\dfrac{25}{28} - \dfrac{14}{28} = \dfrac{11}{28}$

your answer! YAY!

FRACTIONS AND DECIMALS
Simplify the fractions below. Use your GCF/LCM skills to help you.

1. $\dfrac{6}{30}$ = _____

2. $\dfrac{5}{10}$ = _____

3. $\dfrac{4}{40}$ = _____

4. $\dfrac{24}{30}$ = _____

5. $\dfrac{6}{8}$ = _____

6. $\dfrac{8}{12}$ = _____

7. $\dfrac{12}{24}$ = _____

8. $\dfrac{99}{108}$ = _____

9. $\dfrac{4}{8}$ = _____

10. $\dfrac{18}{90}$ = _____

11. $\dfrac{50}{80}$ = _____

12. $\dfrac{63}{72}$ = _____

Add/Subtract the fractions. Use your GCF/LCM skills to help you.
Show all your work on a separate piece of paper.

$\frac{23}{25} + \frac{9}{30} =$ _____

$\frac{1}{5} + \frac{3}{5} =$ _____

$\frac{4}{12} + \frac{8}{12} =$ _____

$\frac{25}{30} + \frac{5}{9} =$ _____

$\frac{1}{2} + \frac{19}{20} =$ _____

$\frac{1}{15} + \frac{38}{100} =$ _____

$\frac{1}{2} - \frac{1}{11} =$ _____

$\frac{4}{6} - \frac{2}{6} =$ _____

$\frac{7}{9} - \frac{3}{4} =$ _____

$\frac{16}{30} - \frac{9}{20} =$ _____

$\frac{1}{3} - \frac{1}{17} =$ _____

$\frac{2}{4} - \frac{2}{8} =$ _____

Add/Subtract the mixed numbers. Show all your work.

$13 \frac{4}{10} + 9 \frac{2}{10} =$ _____

$1 \frac{7}{11} + 2 \frac{6}{7} =$ _____

$17 \frac{1}{6} + 19 \frac{10}{15} =$ _____

$6 \frac{2}{5} + 2 \frac{1}{6} =$ _____

$19 \frac{1}{6} + 13 \frac{3}{19} =$ _____

$1 \frac{4}{11} + 4 \frac{15}{17} =$ _____

$20 \frac{8}{15} - 20 \frac{2}{4} =$ _____

$18 \frac{1}{6} - 17 \frac{4}{16} =$ _____

$20 \frac{4}{11} - 6 \frac{1}{12} =$ _____

$18 \frac{2}{9} - 11 \frac{14}{15} =$ _____

$15 \frac{2}{4} - 10 \frac{2}{20} =$ _____

$18 \frac{27}{30} - 18 \frac{8}{9} =$ _____

Convert each decimal to a mixed number or each mixed number to a decimal.
Simplify the fraction when possible!

8.05 = _____

2.32 = _____

9.1 = _____

4.2 = _____

1.15 = _____

6.4 = _____

6.44 = _____

2.8 = _____

5.91 = _____

7.6 = _____

$4\frac{18}{25}$ = _____

$1\frac{2}{3}$ = _____

$10\frac{1}{2}$ = _____

$8\frac{86}{100}$ = _____

$10\frac{1}{4}$ = _____

$7\frac{42}{50}$ = _____

$8\frac{4}{5}$ = _____

$2\frac{6}{10}$ = _____

$7\frac{13}{20}$ = _____

$4\frac{1}{2}$ = _____

Find the sum of each decimal set.

1.   1.4
   + 0.2
   ‾‾‾‾‾

2.   0.000
   + 0.015
   ‾‾‾‾‾‾

3.   0.16
   + 0.23
   ‾‾‾‾‾

4.   0.21
   + 0.14
   ‾‾‾‾‾

5.   0.0027
   + 0.0001
   ‾‾‾‾‾‾

6.   0.008
   + 0.011
   ‾‾‾‾‾

7.   1.3
   + 0.3
   ‾‾‾‾‾

8.   0.008
   + 0.031
   ‾‾‾‾‾

9.   0.0034
   + 0.0013
   ‾‾‾‾‾‾

10.   3.9
   + 0.4
   ‾‾‾‾‾

Find the difference of each decimal set.

1.　3.00
－ 0.54
_____

2.　0.00600
－ 0.00064
_____

3.　0.00900
－ 0.00088
_____

4.　0.0300
－ 0.0095
_____

5.　70.0
－　8.5
_____

6.　0.0100
－ 0.0087
_____

7.　40.0
－　2.1
_____

8.　2.00
－ 0.32
_____

9.　2.00
－ 0.28
_____

10.　0.900
－ 0.086
_____

Find the product of each decimal set.

1.
$$\begin{array}{r} 0.38 \\ \times\ 0.127 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 0.10 \\ \times\ 37.7 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 0.094 \\ \times\ 0.367 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 3.4 \\ \times\ 4.72 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 7.8 \\ \times\ 0.258 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 0.053 \\ \times\ 0.578 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 0.052 \\ \times\ 8.17 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 1.3 \\ \times\ 9.16 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 0.078 \\ \times\ 31.9 \\ \hline \end{array}$$

Find the quotient of each decimal set.

1.

$0.01 \overline{)\, 37.43}$

2.

$0.6 \overline{)\, 350.2}$

3.

$0.4 \overline{)\, 588.5}$

4.

$0.2 \overline{)\, 628.3}$

5.

$0.3 \overline{)\, 13.82}$

6.

$0.2 \overline{)\, 863.1}$

GEOMETRY REVIEW
Identify each triangle - right, equilateral, scalene, or isosceles.

1
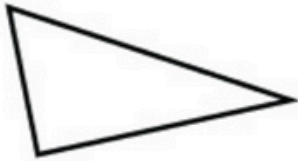
2
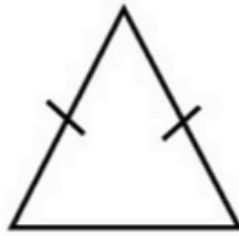
3

_____

_____

_____
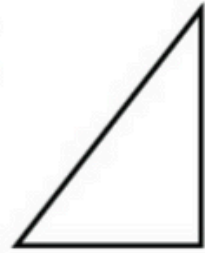
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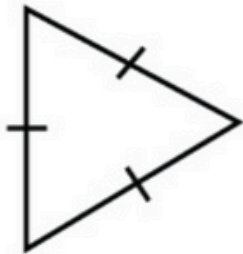
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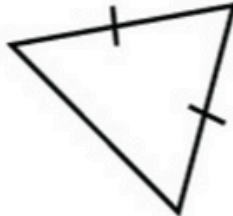
6

_____

_____

_____
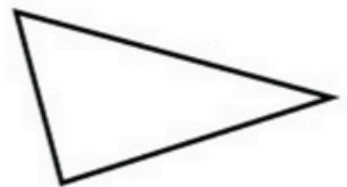
Identify each triangle based on their angles
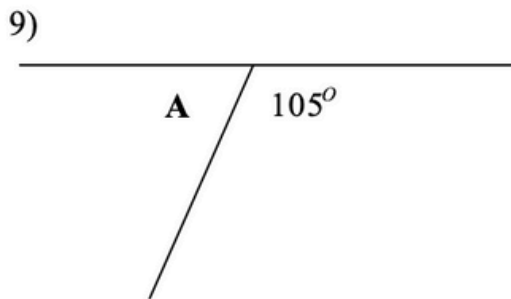
7
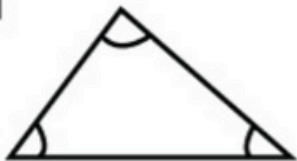
8
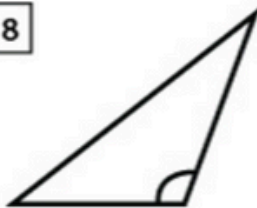
9

_____

_____

_____
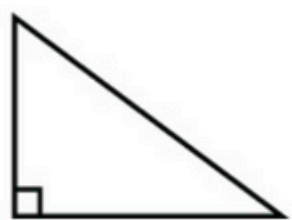
10
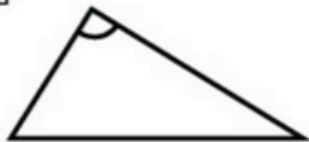
11
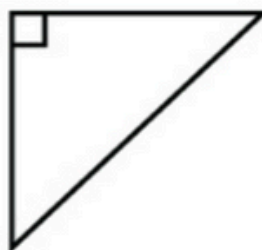
12

_____

_____

_____
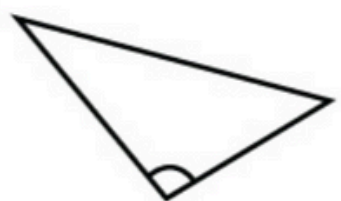
Complimentary v. Supplementary Angles

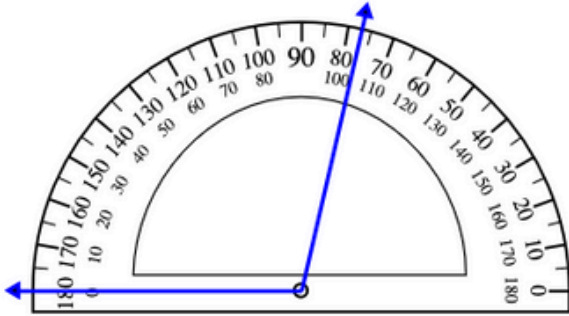For problems 1 – 4, the angles are complimentary. Find the measure of the missing angle.

1)

P
37°

2)

68°
B

3)

Q
40°

4)

S
25°
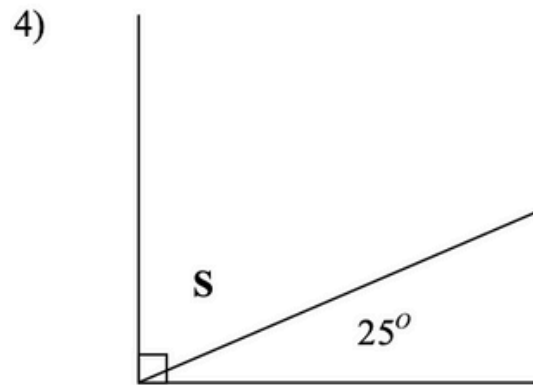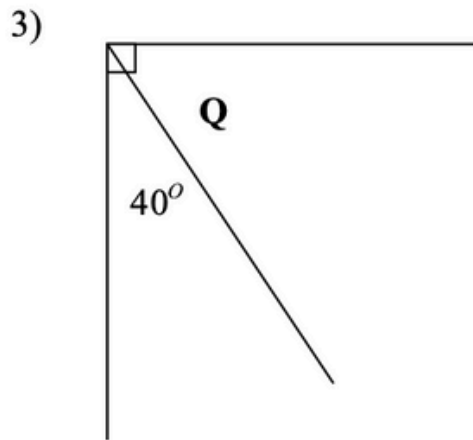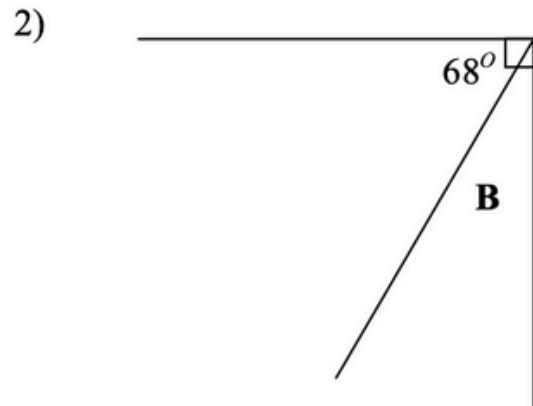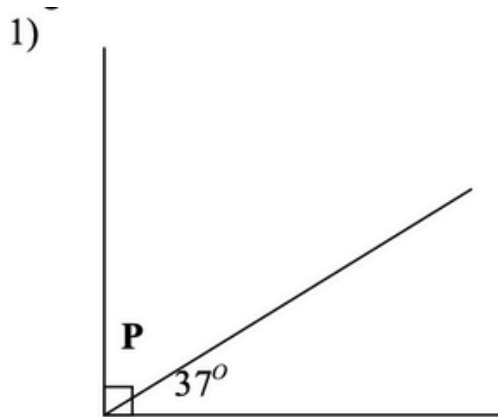
For problems 9 – 12, the angles are supplementary. Find the measure of the missing angle.
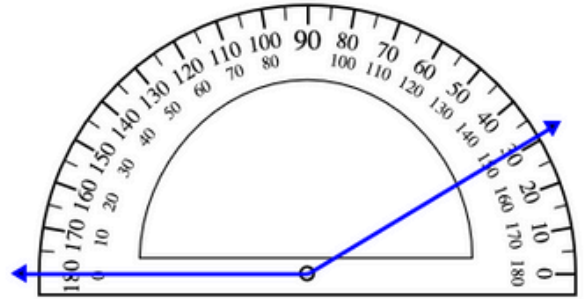
9)

A 105°

10)

X 21°

11)

47° B

12)

H 73°
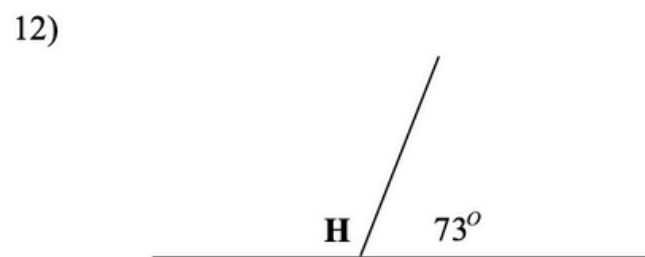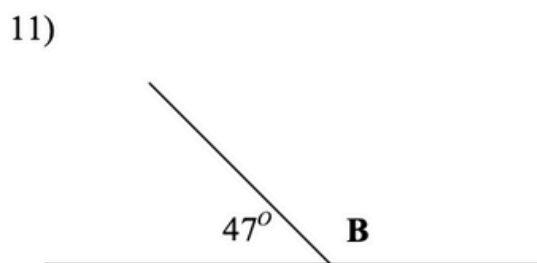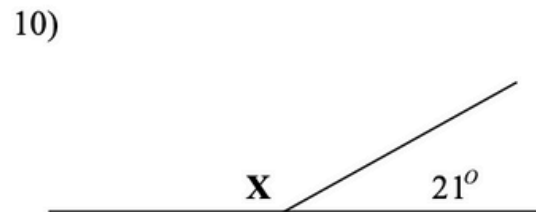
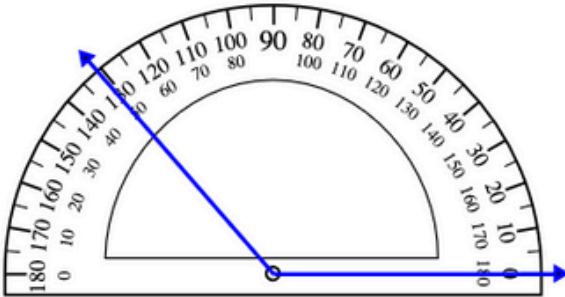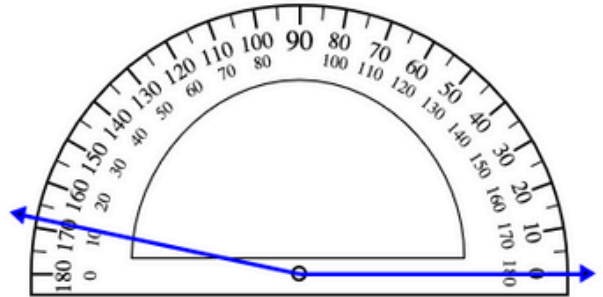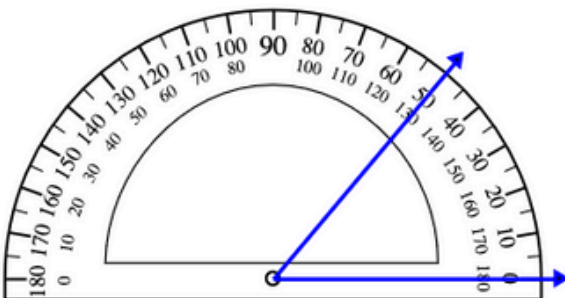# Use the protractor to determine each angle.
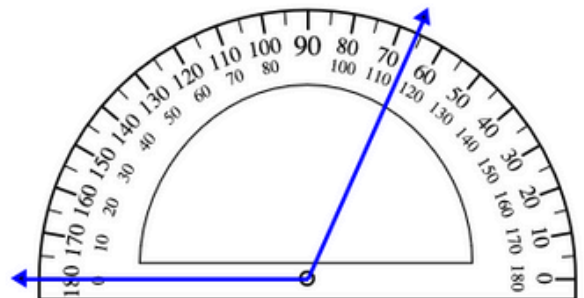
1)

2)

3)
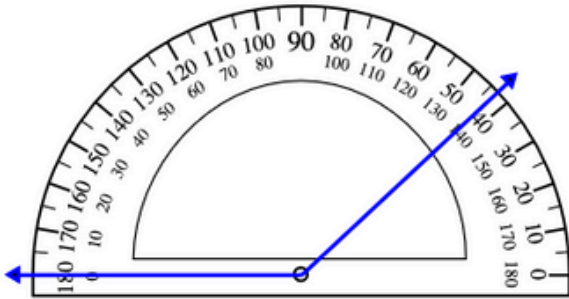
4)
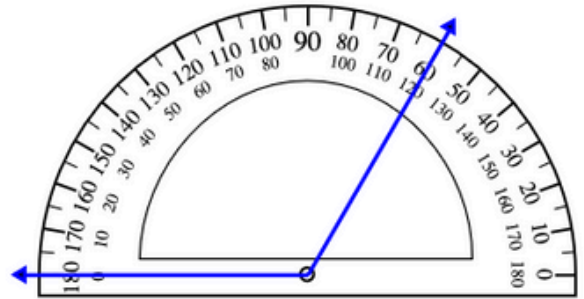
5)

6)

7)

8)

SIMPLE WORD PROBLEMS

Carlos walks 3.65 kilometers on Saturday and 1.46 kilometers on Sunday. How many total kilometers does Carlos walk on Saturday and Sunday?

What is 34.275 rounded to the nearest hundredth?

Saul has $6.00 in quarters. He uses all of the quarters to play video games. If each game requires 3 quarters, what is the total number of video games that Saul plays?

A) 2   B) 8   C) 12   D) 18

A company has an annual employee picnic. The company rents buses to transport the employees to the picnic area. There are 1,320 employees. Each bus carries a total of 54 employees. What is the minimum number of buses the company needs to transport all of the employees to the picnic area?

A) 24   B) 25   C) 26   D) 27

Which comparison is true?

A) 0.04 > 0.14   C) 0.27 < 0.36
B) 0.83 > 0.92   D) 0.52 < 0.49

SIMPLE WORD PROBLEMS

Alen is packing to move to another apartment down the hall. He packed 24 boxes. Each box can hold up to 8 lb. The trolley he is using to move can take up to 32 lb. How many trips does it take him to move if he only has one trolley?

The perimeter of a park is 70 m. If it's width is 13 m, then find the area of the park.

Anna wants to water a rectangular field which is 80m 30 cm long and 20 m wide. What is the cost of watering it at the rate of $5 per square meter?

Alaina has a total of sixty dollars. She buys six water guns for $3 each and 7 pens for $5 each. How much money did Alaina have left?

Michael and his brother Allen played basketball. Each basket was worth 5 points. Michael scored 35 points. Allen scored 20 points. What is the total number of baskets made during this game?

MULTISTEP WORD PROBLEMS

Liam makes and sells handmade blankets. He buys 18 yards of fabric at a rate of $6.75 per yard. Liam uses 1.5 yards of fabric to make each blanket, and uses all of the fabric. Liam sells each blanket for $18.75. What is the proﬁt Liam makes after buying the fabric and selling all the blankets?

Calvin paints pictures and sells them at art shows. He charges $56.25 for a large painting. He charges $25.80 for a small painting. Last month he sold six large paintings and three small paintings. How much did he make in all?

Jasmine wants to organize her books in order of most number of pages to least number of pages. Jasmine's longest book has 396 pages and her shortest book has one-fourth as many pages as the longest. If the book in the middle of her shelf has three times the number of pages of the shortest book, then how many pages does the middle book have?

MULTISTEP WORD PROBLEMS

Hector serves ice cream at a local ice cream shop. He sells 19 ice cream cones on Saturday, 27 ice cream cones on Sunday, and 153 ice cream cones for the entire week. How many ice cream cones did Hector sell on the weekdays?

Caleb wants to rent a kayak. Kayak rentals cost $14.50 for a half hour. If Caleb rents a kayak for one hour and forty-five minutes, how much will it cost him?

Ann is baking cookies. She bakes three dozen oatmeal raisin cookies, two dozen sugar cookies, and four dozen chocolate chip cookies. Ann gives away two dozen oatmeal raisin cookies, 1.5 dozen sugar cookies, and 2.5 dozen chocolate chip cookies. How many total cookies does she keep? (Give an exact number.)