

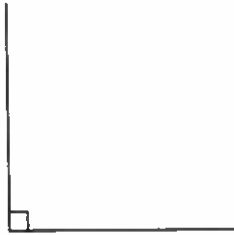
Naming Angles



Quick Review

An angle is formed when 2 lines meet.

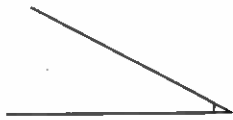
right angle



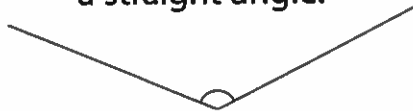
straight angle



An **acute angle** is less than a right angle.



An **obtuse angle** is greater than a right angle, but less than a straight angle.



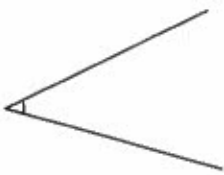
A **reflex angle** is greater than a straight angle.



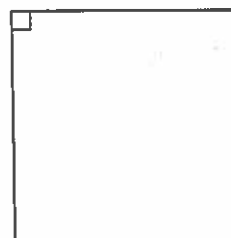
Try These

1. Name each angle as a right, acute, obtuse, straight, or reflex angle.

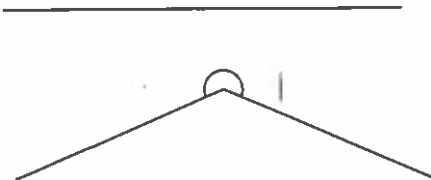
a)



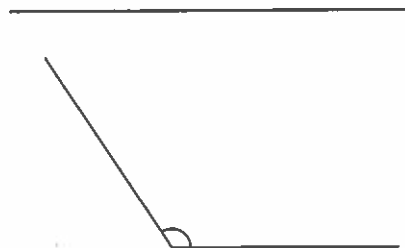
b)



c)



d)

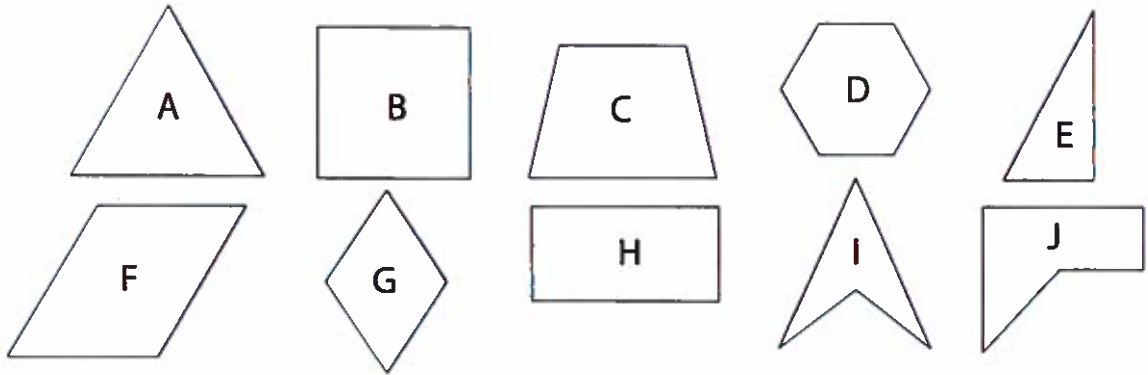


Practice

1. List the shapes with:

a) a right angle _____ b) an obtuse angle _____

c) an acute angle _____ d) a reflex angle _____



2. Name each angle.

a)



b)



c)



d)



Stretch Your Thinking

Think about the angles formed by the hour hand and the minute hand on a clock. Write a time when the angle is:

a) an acute angle _____

b) an obtuse angle _____

c) a right angle _____

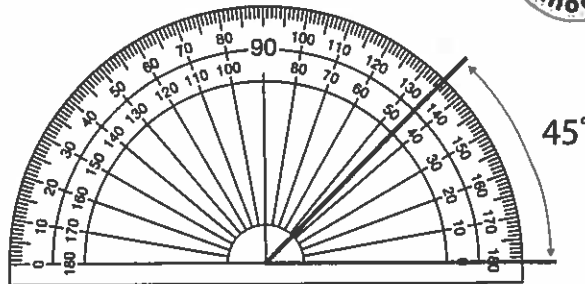
d) a reflex angle _____

Measuring Angles



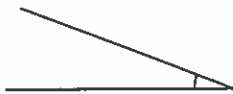
Quick Review

- ▶ A **standard protractor** shows angle measures from 0° to 180° , both clockwise and counterclockwise. The measure of this angle is 45° .



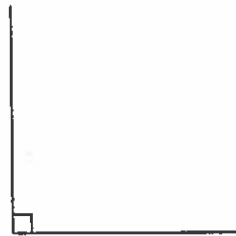
- ▶ Angles are named according to their measures in degrees.

Acute Angle



less than 90°

Right Angle



90°

Obtuse Angle



between 90° and 180°

Straight Angle



180°

Reflex Angle



between 180° and 360°

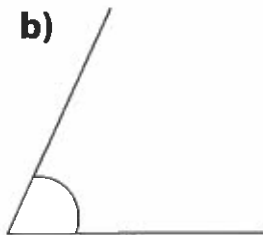
Try These

1. Use a protractor to measure each angle. Record the measurements.

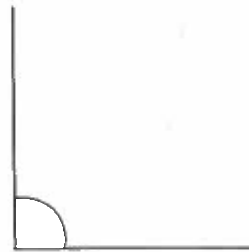
a)



b)

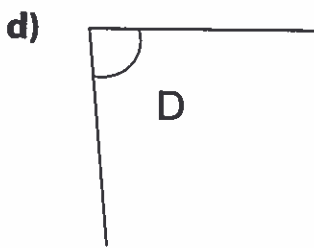
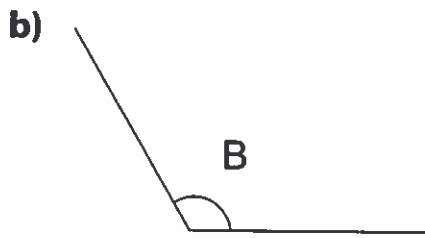
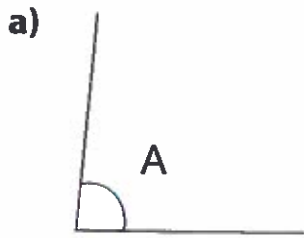


c)



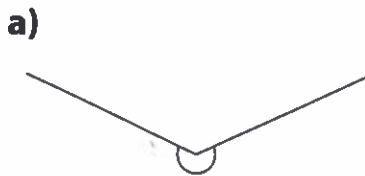
Practice

1. Measure each angle. Record the measurements in the chart.



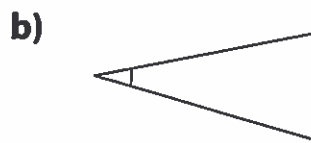
Angle	Measure
A	
B	
C	
D	

2. Estimate the size of each angle.
Measure and record each angle size.



Estimate: _____

Measure: _____



Estimate: _____

Measure: _____



Estimate: _____

Measure: _____

3. Name each angle in question 2 as acute, right, obtuse, or reflex.

a) _____

b) _____

c) _____

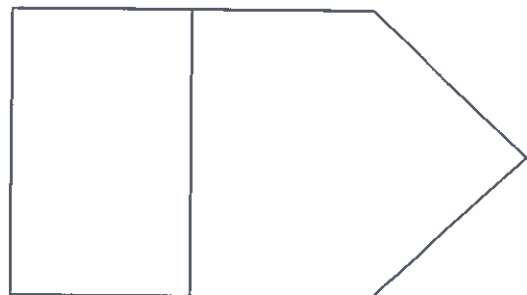
Stretch Your Thinking

How many of each kind of angle can you find in this picture?
Mark each kind in a different colour.

a) right angle _____

b) obtuse angle _____

c) acute angle _____



What happened when the man stayed up all night looking for the sun?



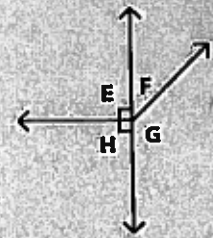
Solve the following problems in the sections below. Then record the corresponding letter of the correct answer in the rectangles at the bottom to answer the riddle.

Note: The problem numbers match the numbered rectangles.

- ① An angle greater than 90° is a(n) _____ angle.
N right **D** acute **H** obtuse **J** straight
- ② An angle that measures 42° is a(n) _____ angle.
A right **N** acute **E** obtuse **F** straight
- ③ Two right angles adjacent to each other make a(n) _____ angle.
O right **B** acute **M** obtuse **T** straight
- ④ A right angle measures exactly _____ degrees.
G 45° **D** 90° **L** 180° **I** 360°

Use Diagram A to solve problems 5–8:

DIAGRAM A



- ⑤ Angle F is a(n) _____ angle.
B right **O** acute **H** obtuse **K** straight
- ⑥ Angle H is a(n) _____ angle.
A right **N** acute **P** obtuse **C** straight
- ⑦ Angle F and Angle G together create a(n) _____ angle.
K right **P** acute **F** obtuse **I** straight
- ⑧ Angle E and Angle F together create a(n) _____ angle.
A right **G** acute **M** obtuse **O** straight

- ⑨ Which of the angles to the right is an acute angle?
W **H** **C** **N**
- ⑩ Angle A measures 61° . If Angle B is adjacent to Angle A and Angle A and Angle B together make a right angle, what is the measure of Angle B?
A 9° **N** 29° **F** 19° **R** 119°
- ⑪ Two _____ angles added together ALWAYS make a straight angle.
M adjacent **I** right **N** acute **E** obtuse
- ⑫ Which kind of angle is greater than 90° ?
I right **N** acute **E** obtuse **F** straight
- ⑬ Joey built a chair whose leg forms an 80° angle with the floor. What kind of angle is this?
L right **D** acute **J** obtuse **C** straight

7	3
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13	6	9	2	12	4
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5	10
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1	11	8
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NAME: _____

DATE: _____

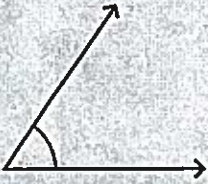
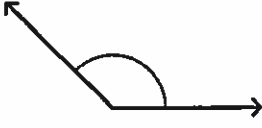
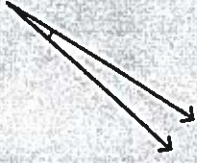

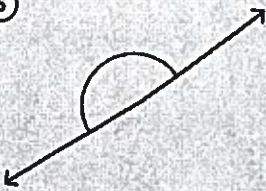
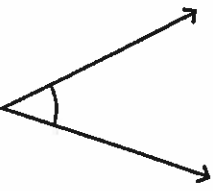
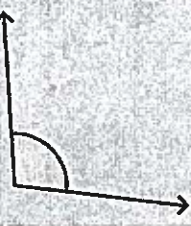
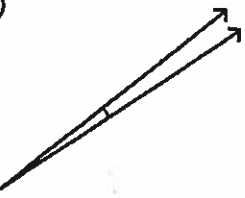
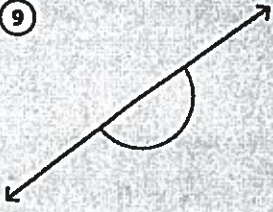
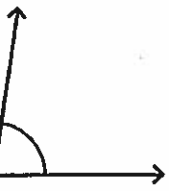
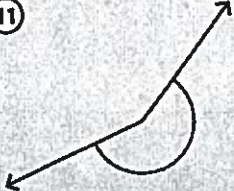
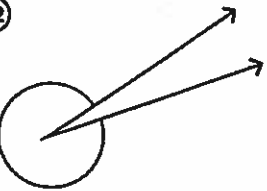
What did Jessie say when she learned her class was taking a field trip to the soda factory?



Solve the following problems in the sections below. Then record the corresponding letter of the correct answer in the rectangles at the bottom to answer the riddle.

Note: The problem numbers match the numbered rectangles.

For each figure, choose which angle measure is a good estimate:

<p>① </p>	<p>E 45° N 55° G 90°</p>	<p>② </p>	<p>J 28° I 95° T 135°</p>	<p>③ </p>	<p>H 10° A 30° Z 105°</p>
<p>④ </p>	<p>S 77° U 91° R 116°</p>	<p>⑤ </p>	<p>C 15° F 105° R 175°</p>	<p>⑥ </p>	<p>D 32° I 45° L 71°</p>
<p>⑦ </p>	<p>H 65° E 100° A 140°</p>	<p>⑧ </p>	<p>S 5° I 15° M 180°</p>	<p>⑨ </p>	<p>Z 2° A 99° O 177°</p>
<p>⑩ </p>	<p>E 66° Z 81° B 92°</p>	<p>⑪ </p>	<p>B 15° N 165° Q 205°</p>	<p>⑫ </p>	<p>S 20° A 72° P 345°</p>

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 ”

6 3 9 12 7 2 3 7 5 7 8 1 9 12 9 12 11 4 6 10

NAME: _____

DATE: _____

What did the cartoonist's boss say when he was unhappy with his latest drawing?

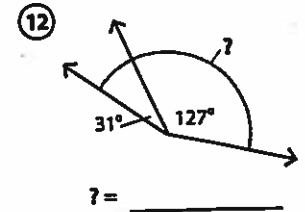
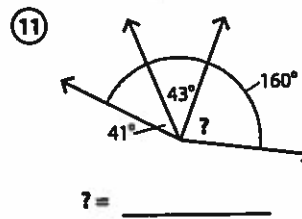
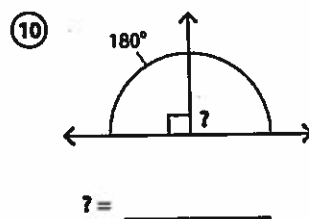
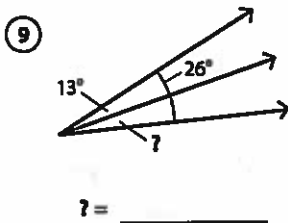
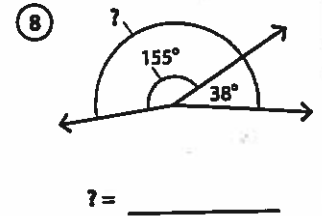
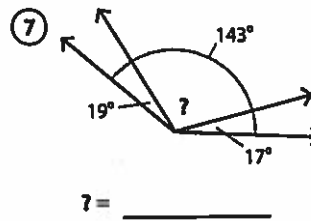
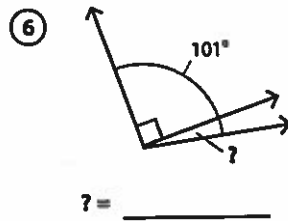
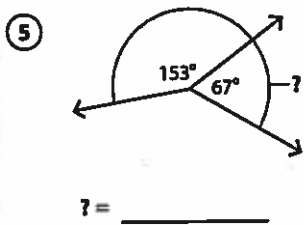
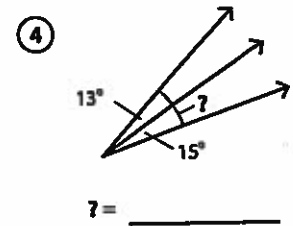
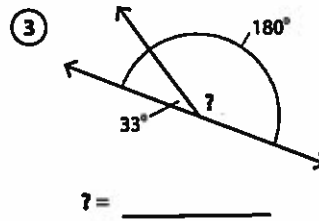
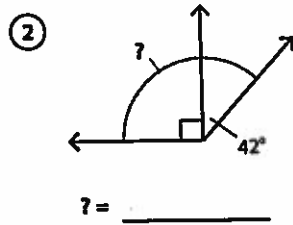
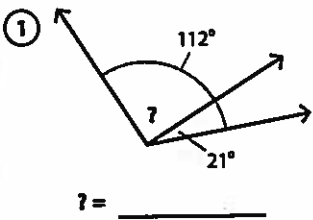


Solve the following problems and match your answers to the answers in the Legend. Then record the corresponding letter of the correct answer in the rectangles at the bottom to answer the riddle.
Note: The problem numbers match the numbered rectangles.

- | | | | | |
|---------------|---------------|---------------|---------------|---------------|
| Y 28° | A 132° | E 147° | O 158° | G 193° |
| N 76° | B 99° | H 11° | U 91° | T 220° |
| D 107° | C 90° | R 13° | L 70° | |

LEGEND →

Find the missing angle measure:



“

4	12	1

11	3	3	7

5	12

10	6	2	11	8	3	

4	12	1	9

5	12	12	11

 ”

Skill: Finding missing angles using properties of adjacent angles

Why did the knitting woman take forever in the craft store?



Solve the following problems in the sections below. Then record the corresponding letter of the correct answer in the rectangles at the bottom to answer the riddle.

Note: The problem numbers match the numbered rectangles.

① Angles that are complementary sum to _____.

- R** 75° **G** 90° **P** 180° **E** 360°

② Angles that are supplementary sum to _____.

- K** 75° **B** 90° **C** 180° **F** 360°

③ Find the angle supplementary with a 101° angle.

- G** 15° **T** 69° **B** 79° **A** 91°

④ Find the angle complementary with a 10° angle.

- A** 80° **I** 90° **E** 170° **R** 350°

⑤ $\angle ABC$ and $\angle CBD$ are:

H complementary
A supplementary
L neither

⑥ $\angle DEF$ and $\angle FEG$ are:

L complementary
D supplementary
Y neither

⑦ $\angle PQR$ and $\angle RQS$ are:

H complementary
P supplementary
Z neither

⑧ Which two angles are complementary?

- T** 36° and 54° **W** 72° and 108° **L** 28° and 72°

⑨ Which two angles are supplementary?

- M** 81° and 9° **J** 202° and 68° **W** 115° and 65°

Use the angles on the left to solve problems 10–15:

⑩ What angle is complementary to $\angle ABC$?

- B** 164° **E** 84° **N** 74°

⑪ What angle is supplementary to $\angle ABC$?

- S** 164° **T** 84° **W** 74°

⑫ What angle is supplementary to $\angle JKL$?

- O** 23° **E** 33° **J** 103°

⑬ What angle is supplementary to $\angle TUV$?

- E** 90° **I** 180° **U** 270°

⑭ What angle is complementary to $\angle EFG$?

- I** 85° **O** 175° **Q** 265°

⑮ What angle is supplementary to $\angle EFG$?

- S** 85° **K** 175° **Z** 265°

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