Math Antics
Worksheets

Name:

Date:

Measuring Angles

Instructions: Use a protractor to measure how many degrees each angle is. If you don't have a protractor, then just estimate and see how close you got.
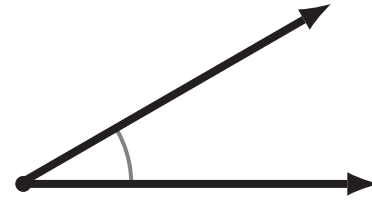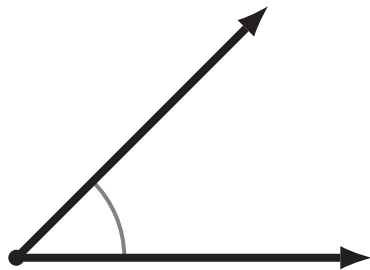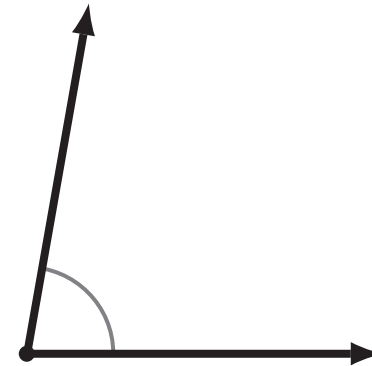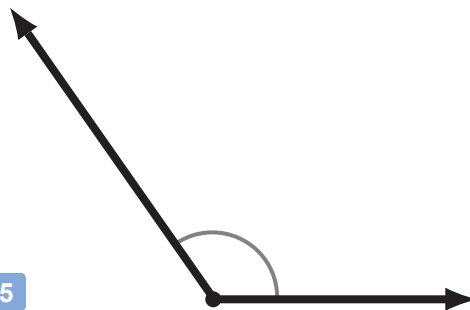
1

15°

2

30°

3

45°

4

80°

5
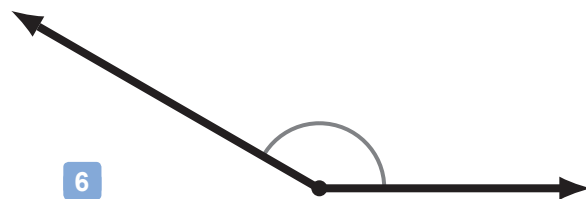
125°

6
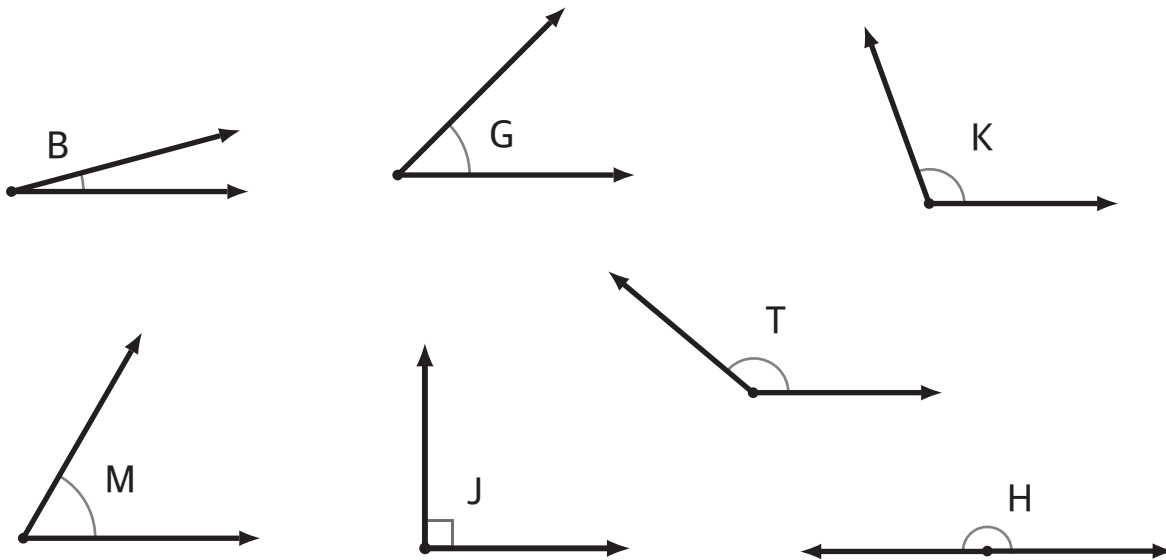
150°

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Comparing Angles

Instructions: Use the greater-than '>' and less-than '<' signs to compare these angles. (If you have trouble comparing the angles visually, you can use a protractor to measure them.)

1 ∠B $<$ ∠G		**2** ∠J $>$ ∠G
3 ∠M $>$ ∠B		**4** ∠T $<$ ∠H
5 ∠J $<$ ∠K		**6** ∠J $<$ ∠H
7 ∠T $>$ ∠M		**8** ∠K $>$ ∠G
9 ∠G $<$ ∠M		**10** ∠T $>$ ∠K

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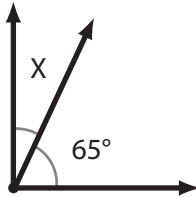
Finding an Unknown Angle

Instructions: For each set of complementary or supplementary angles, find the unknown angle (X).

1

X
65°

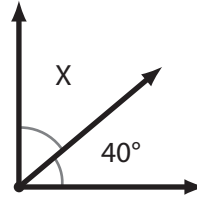m∠X = __25°__

$$\begin{array}{r} \overset{8}{\cancel{9}}\overset{1}{0} \\ -\ 65 \\ \hline 25 \end{array}$$

2

X
40°

m∠X = __50°__

$$\begin{array}{r} 90 \\ -\ 40 \\ \hline 50 \end{array}$$

3
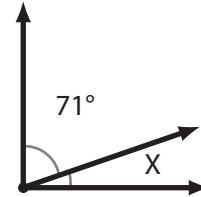
71°
X

m∠X = __19°__

$$\begin{array}{r} \overset{8}{\cancel{9}}\overset{1}{0} \\ -\ 71 \\ \hline 19 \end{array}$$

4

X
36°

m∠X = __144°__

$$\begin{array}{r} \overset{7}{1}\overset{1}{8}0 \\ -\ 36 \\ \hline 144 \end{array}$$

5

142°
X

m∠X = __38°__

$$\begin{array}{r} \overset{7}{1}\overset{1}{8}0 \\ -142 \\ \hline 38 \end{array}$$

6

X
110°
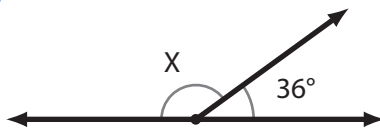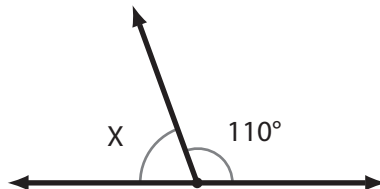
m∠X = __70°__

$$\begin{array}{r} 180 \\ -110 \\ \hline 70 \end{array}$$

7

95°
X

m∠X = __85°__

$$\begin{array}{r} \overset{17}{1}\overset{1}{8}0 \\ -\ 95 \\ \hline 85 \end{array}$$

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Finding an Unknown Angle - Set 2

Instructions: For each set of complementary or supplementary angles, find the unknown angle (X).

1

X   77°

m∠X = _____ **103°** _____

$$
\begin{array}{r}
{}^{7}1{}^{8}\!8{}^{1}0 \\
-\ 77 \\
\hline
103
\end{array}
$$

2

162°   X

m∠X = _____ **18°** _____

$$
\begin{array}{r}
{}^{7}1{}^{8}\!8{}^{1}0 \\
-\ 162 \\
\hline
18
\end{array}
$$

3

X
53°

m∠X = _____ **37°** _____

$$
\begin{array}{r}
{}^{8}9{}^{1}0 \\
-\ 53 \\
\hline
37
\end{array}
$$

4

29°
X

m∠X = _____ **61°** _____

$$
\begin{array}{r}
{}^{8}9{}^{1}0 \\
-\ 29 \\
\hline
61
\end{array}
$$

5

X
75°

m∠X = _____ **15°** _____

$$
\begin{array}{r}
{}^{8}9{}^{1}0 \\
-\ 75 \\
\hline
15
\end{array}
$$

6

57°
X

m∠X = _____ **33°** _____

$$
\begin{array}{r}
{}^{8}9{}^{1}0 \\
-\ 57 \\
\hline
33
\end{array}
$$

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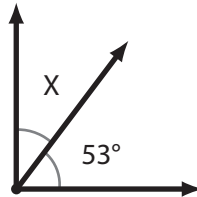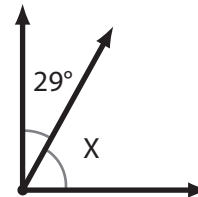
Finding an Unknown Angle - Set 3

Instructions: Find the unknown angle (A). These problems are a little more tricky, so if you have trouble, ask someone for help or check the answer key to see the solutions.

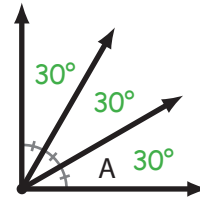**1** This supplementary angle is divided into three **equal** parts.

60°

A

60°   60°
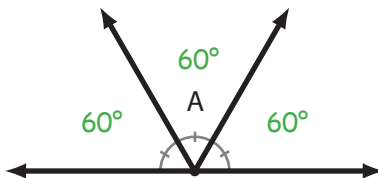
$m\angle A =$ ___60°___

$3A = 180°$
so
$A = 180 \div 3$
$A = 60$

2 This complementary angle is divided into three **equal** parts.

30°

30°

A   30°

$m\angle A =$ ___30°___

$3A = 90°$
so
$A = 90 \div 3$
$A = 30$

3

A
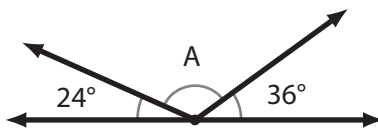
24°   36°

$m\angle A =$ ___120°___

$A + 24 + 36 = 180°$

$A + 60 = 180°$

$A = 180 - 60$

$A = 120$

4 $m\angle A = m\angle B$

A

B

90°
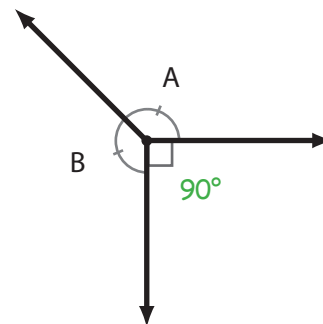
$m\angle A =$ ___135°___

The total of A and B must be 270° because
360° - 90° = 270° (remember that a full circle is
360° and a right angle is 90°)
And since we know that A and B are equal, A must
be half of 270°

$A = 270 \div 2$
$A = 135$

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