

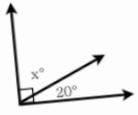
Using Properties of Angles to Solve Equations

NOTES

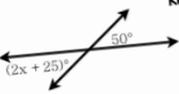
Using Angle Measurements to Solve Multi-Step Equations
To solve for a missing value, complete the following steps.

1) _____
2) _____
3) _____

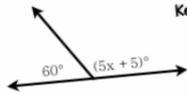
Type of Angles: _____
Key Information: _____
Equation: _____
Solution: _____



Type of Angles: _____
Key Information: _____
Equation: _____
Solution: _____



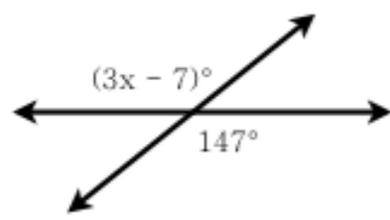
Type of Angles: _____
Key Information: _____
Equation: _____
Solution: _____



Type of Angles: _____
Key Information: _____
Equation: _____
Solution: _____

Type of Angles: _____
Key Information: _____

1

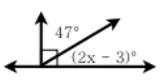
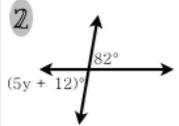
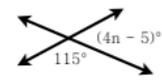
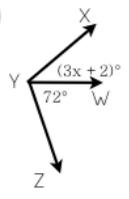
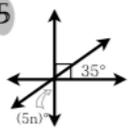


Type of Angles: _____
Key Information: _____
Equation: _____

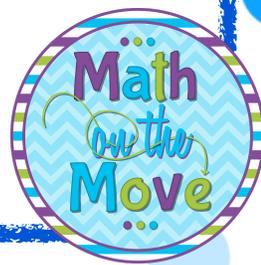
Solution: _____

Using Angles to Solve Equations - Exit Slip Name: _____

Write an equation and solve for the missing value. Show your work.

<p>1</p> 	<p>2</p> 	<p>3</p> 
<p>4</p>  <p>$m \angle XYZ = 110^\circ$</p>	<p>5</p> 	

- Notes Page
- Practice
- Assessment



Possible Directions For Use:

1. Copy the Notes Page for each student. I have students cut out it out and glue it in their notebooks (after the notes are finished).
2. Use the answer key to guide you as you take students through the notes.
3. Once the notes page is completed, have students cut and paste it into their notebooks.
4. Pass out the worksheet as homework, in-class practice, or partner work.
5. The half-sheet exit slip can be used as a formative assessment, for homework, or as an entrance slip the next day.

Helpful hint: I have a bulletin board, where I staple up all notes pages answer keys after a lesson. This is helpful for absent students. I also will use it as a reference throughout the unit.

NOTES

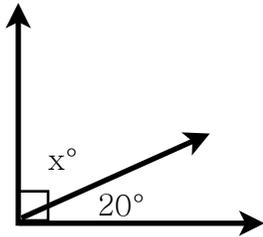
Using Angle Measurements to Solve Multi-Step Equations

To solve for a missing value, complete the following steps.

1) _____

2) _____

3) _____

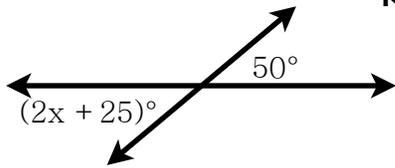


Type of Angles: _____

Key Information: _____

Equation: _____

Solution: _____

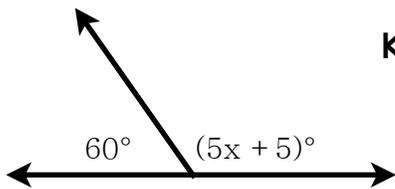


Type of Angles: _____

Key Information: _____

Equation: _____

Solution: _____

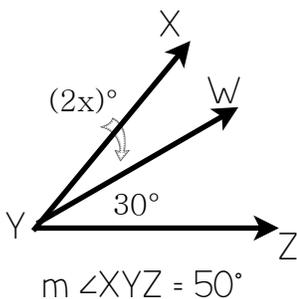


Type of Angles: _____

Key Information: _____

Equation: _____

Solution: _____



Type of Angles: _____

Key Information: _____

Equation: _____

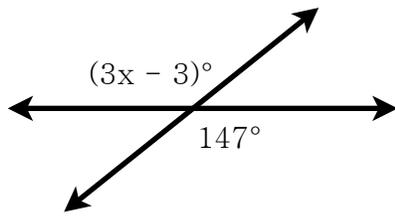
Solution: _____

Multi-Step Equations - Practice Worksheet

Name: _____

For each problem, solve for the missing value. Show your work when solving the equation.

1



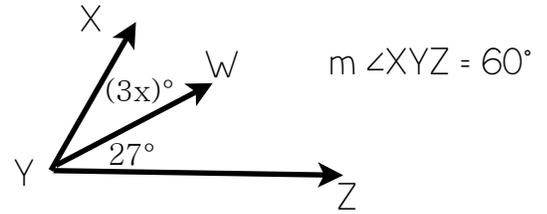
Type of Angles: _____

Key Information: _____

Equation: _____

Solution: _____

2



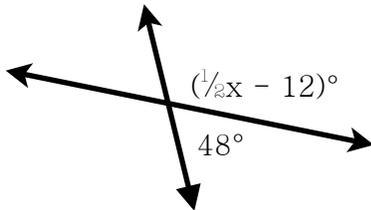
Type of Angles: _____

Key Information: _____

Equation: _____

Solution: _____

3



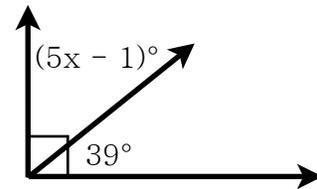
Type of Angles: _____

Key Information: _____

Equation: _____

Solution: _____

4



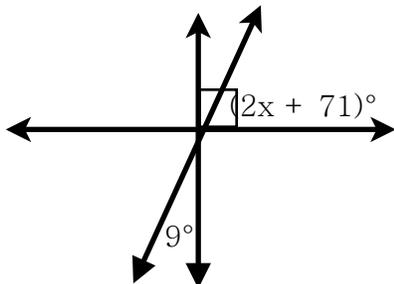
Type of Angles: _____

Key Information: _____

Equation: _____

Solution: _____

5



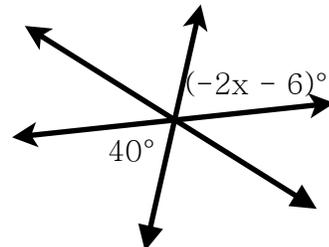
Type of Angles: _____

Key Information: _____

Equation: _____

Solution: _____

6



Type of Angles: _____

Key Information: _____

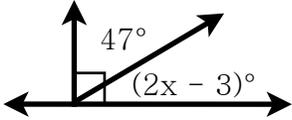
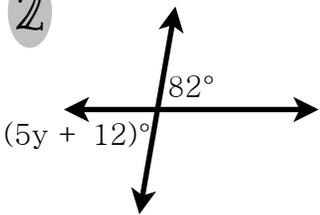
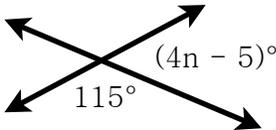
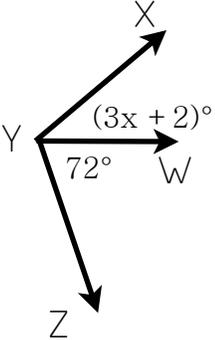
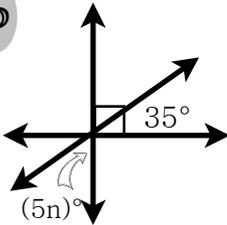
Equation: _____

Solution: _____

Using Angles to Solve Equations - Exit Slip

Name: _____

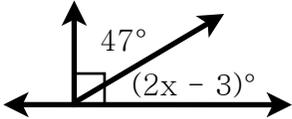
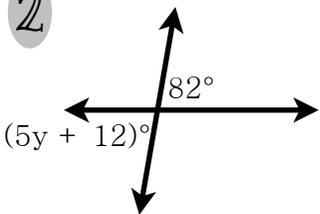
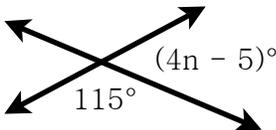
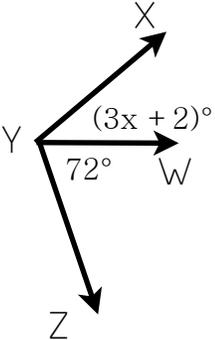
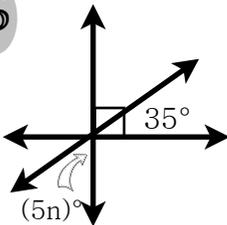
Write an equation and solve for the missing value. Show your work.

<p>1</p> 	<p>2</p> 	<p>3</p> 
<p>4</p>  <p style="margin-left: 150px;">$m \angle XYZ = 110^\circ$</p>	<p>5</p> 	

Using Angles to Solve Equations - Exit Slip

Name: _____

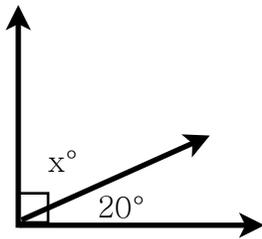
Write an equation and solve for the missing value. Show your work.

<p>1</p> 	<p>2</p> 	<p>3</p> 
<p>4</p>  <p style="margin-left: 150px;">$m \angle XYZ = 110^\circ$</p>	<p>5</p> 	

Using Angle Measurements to Solve Multi-Step Equations

To solve for a missing value, complete the following steps.

- 1) Identify the types of angles given
- 2) Determine the relationship the two angles have
- 3) Set up an equation and solve for the missing value

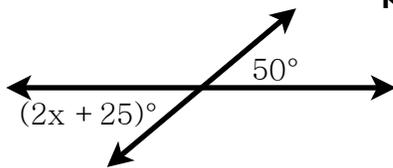


Type of Angles: complementary

Key Information: sum is 90°

Equation: $x + 20 = 90$

Solution: $x = 70$

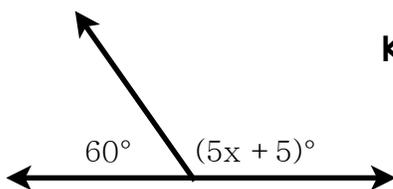


Type of Angles: vertical

Key Information: angles are congruent

Equation: $2x + 25 = 50$

Solution: $x = 12.5$

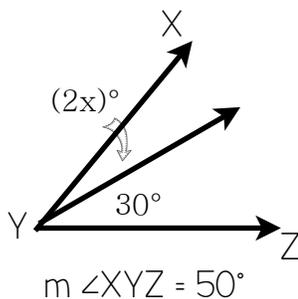


Type of Angles: supplementary

Key Information: sum is 180°

Equation: $5x + 5 + 60 = 180$

Solution: $x = 23$



Type of Angles: adjacent

Key Information: sum is 50°

Equation: $2x + 30 = 50$

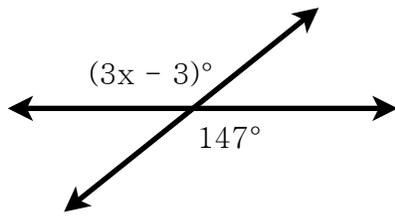
Solution: $x = 10$

Multi-Step Equations - Practice Worksheet

Name: _____ **KEY**

For each problem, solve for the missing value. Show your work when solving the equation.

1



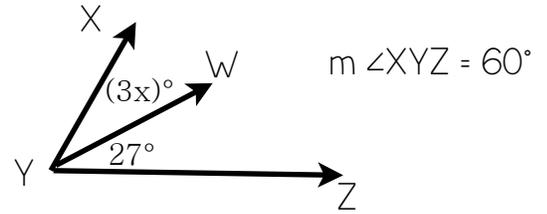
Type of Angles: vertical

Key Information: angles are congruent

Equation: $3x - 3 = 147$

Solution: $x = 50$

2



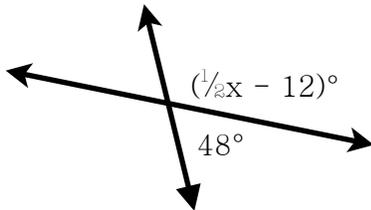
Type of Angles: adjacent

Key Information: sum is 60°

Equation: $3x + 27 = 60$

Solution: $x = 11$

3



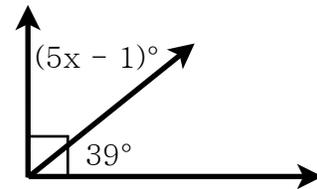
Type of Angles: supplementary

Key Information: sum is 180°

Equation: $\frac{1}{2}x - 12 + 48 = 180$

Solution: $x = 288$

4



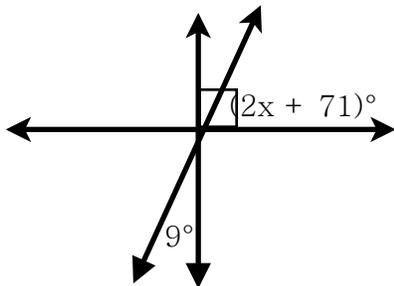
Type of Angles: complementary

Key Information: sum is 90°

Equation: $5x - 1 + 39 = 90$

Solution: $x = 10.4$

5



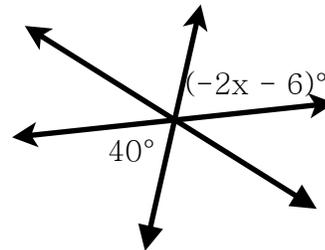
Type of Angles: complementary

Key Information: sum is 90°

Equation: $2x + 71 + 9 = 90$

Solution: $x = 5$

6



Type of Angles: vertical

Key Information: angles are congruent

Equation: $-2x - 6 = 40$

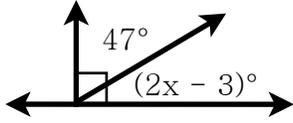
Solution: $x = -23$

Using Angles to Solve Equations - Exit Slip

Name: KEY

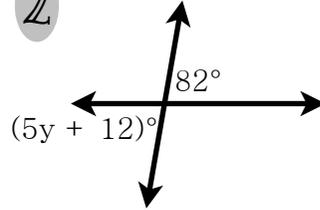
Write an equation and solve for the missing value. Show your work.

1



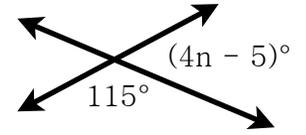
$$\begin{aligned} 2x - 3 + 47 &= 90 \\ 2x + 44 &= 90 \\ x &= 23 \end{aligned}$$

2



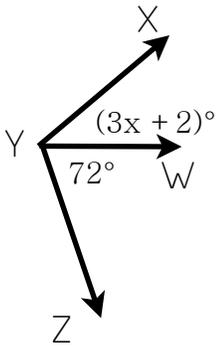
$$\begin{aligned} 5y + 12 &= 82 \\ y &= 14 \end{aligned}$$

3



$$\begin{aligned} 4n - 5 + 115 &= 180 \\ n &= 17.5 \end{aligned}$$

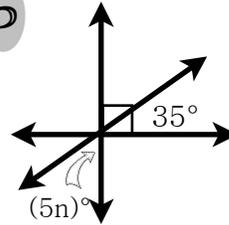
4



$$m \angle XYZ = 110^\circ$$

$$\begin{aligned} 3x + 2 + 72 &= 110 \\ x &= 12 \end{aligned}$$

5



$$\begin{aligned} 5n + 35 &= 90 \\ n &= 11 \end{aligned}$$

Thank you for downloading these notes and worksheets!

I would love to hear how it went. Don't forget to leave feedback and earn credit towards future TpT purchases!

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