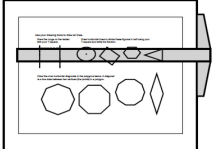


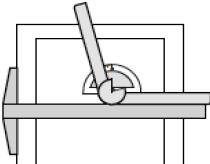
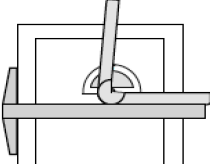
Most recent update: March 7, 2026

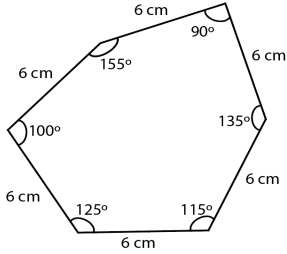
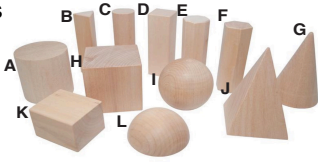
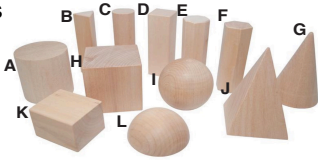
# RightStart™ Mathematics

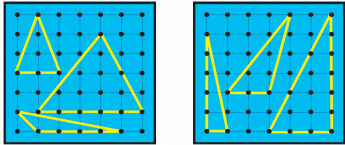
## Corrections and Updates for Grade 4 Lessons and Worksheets, second edition

LESSON/WORKSHEET	CHANGE DATE	CORRECTION OR UPDATE																
Lesson 6	05/20/2021	On the second page, right above the short multiplication table, the answer to $8 \times 9$ should be "go to row 8 and down to row 9" not "go to row 6 and down to row 8."																
Lesson 8	04/18/2018	The Quotient and Remainder game instructions should read: Place the <b>dividend</b> card, the multiplication card, first in the row, as shown below."																
Lesson 19    Worksheet 7	12/01/2020	The last problem on the worksheet should read "Write any 3-digit number <b>with no two numbers being the same.</b> "																
Lesson 19	12/01/2020	On the second page, an explanation was added across from the Worksheet 7 paragraph: <b>If the first and last numbers of the 3-digit number are sequential, such as 493, the difference will be 99. Assume a 0 precedes the 99, giving the reverse number as 990, then the final sum will be 1089. Peter, age 9, found that if the first and third number are the same, such as 181, or if all three digits are the same, such as 333, the final sum is another number!</b>																
Lesson 26	11/18/2016	At the bottom of the page, it reads: "Repeat for: $10,380 - 8267$ ". It should read: "Repeat for: $10,280 - 8367$ "																
Lesson 28    Worksheet 15-A	01/03/2019	The magic square on the bottom of the worksheet is incorrect. See attached <b>PDF</b> . Correct answers are shown here. <div style="float: right; border: 1px solid black; padding: 5px; text-align: center;"> <table style="border-collapse: collapse; margin: 0 auto;"> <tr><td>14</td><td>5</td><td>1</td><td>7</td></tr> <tr><td>-1</td><td><b>7</b></td><td>8</td><td>13</td></tr> <tr><td><b>6</b></td><td><b>4</b></td><td>8</td><td><b>9</b></td></tr> <tr><td>8</td><td>11</td><td><b>10</b></td><td>-2</td></tr> </table> </div>	14	5	1	7	-1	<b>7</b>	8	13	<b>6</b>	<b>4</b>	8	<b>9</b>	8	11	<b>10</b>	-2
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8	11	<b>10</b>	-2															
Lesson 36	04/18/2018	The Quotient and Remainder game instructions should read: Place the <b>dividend</b> card, the multiplication card, first in the row, as shown below."																
Lesson 38 Classroom version only	07/31/2017	On the second page, the second drawing board is depicted to the right of the work, rather than under the worksheet's information. It should look as shown here. <div style="float: right; border: 1px solid black; padding: 5px; text-align: center;">  <p style="font-size: small; margin: 0;">T-square position for left-handed user.</p> </div>																
Lesson 54    Worksheet 33	03/07/2026	Below the graphic, the sentence has been changed to "For the first part of the problem, finding $\frac{2}{3}$ of 6 is 4 <b>rectangles.</b> " On the worksheet, Problem 2, second sentence has been changed to "Hatch $\frac{2}{3}$ of 6 <b>rectangles.</b> " <b>PDF</b> is attached.																
Lesson 55	11/18/2016	For the second Warm-Up, $6374 - 4736$ is <b>1638</b> , not 1636. The check numbers are correct.																



Lesson 83	08/08/2023	For the Warm-Ups multivide, the check digit for 60 in $2352 \times 60$ should be (6), $1680 \div 5$ should be (6), the check digit for $336 \div 4$ should be (3), the check digit for $84 \div 3$ should be (3), and the check digit for $28 \div 2$ should be (1).
Lesson 84	08/19/2016	For the Warm-Ups multivide, the check digit for $1920 \div 5$ should be (3), the check digit for $384 \div 4$ should be (6), the check digit for $96 \div 3$ should be (6), and the check digit for $32 \div 2$ should be (5).
Lesson 85	06/27/2023	On the second page under the second heading, A Mile, a sentence was added at the end of the first paragraph: <b>Ask: How many steps are needed to walk a mile? [2000 steps]</b> This helps connect the upcoming question connecting 10,000 steps and 5 miles.
Lesson 87	02/10/2023	In the bullet points under the gas prices, the fourth bullet should say "The 9/10 means 9/10 of one cent, which is also <b>nine</b> thousandth of a dollar" rather than one thousandths of a dollar. The fifth bullet point should say "...and are also <b>thousandths</b> of a dollar," not thousands of a dollar.
Lesson 89	08/19/2016	For the Warm-Ups multivide, the check digit for $2280 \div 5$ should be (3).
Lesson 91	04/21/2025	In the Warm-Up, the check number for 60 should be (6), not (0).
Lesson 92	03/10/2017	Under the Thirds and sixths in percents heading, second paragraph, it should read Say: <b>Two thirds</b> is $66-2/3\%$ , not one sixth is $66-2/3\%$ .
Lesson 95	08/19/2016	For the Warm-Ups multivide, the partial answer for $90,720 \times 6$ (of 96) should be <b>544,320</b> , not 444,320.
Lesson 97 Worksheet 69	03/10/2017	The third question should read "What percentage of the tangrams <b>are triangles?</b> " not "isosceles triangles". <b>PDF</b> is attached.
Lesson 103 Worksheet 75	10/10/2023	Questions 3 and 4 have been changed to: "Which penagons above have <b>all</b> sides/angles congruent?" not "Which pentagons above have congruent sides/angles?" <b>PDF</b> is attached.
Lesson 104	05/18/2017	The graphics on second page been changed shown here. <div style="display: flex; justify-content: space-around; align-items: center;">   </div> <p style="text-align: center;"> <span style="margin-right: 50px;">Drawing the 105° line on the protractor.</span> <span>Drawing the 85° line on the protractor.</span> </p>
Lesson 104	02/21/2023	The first explanation should read "A 3 cm, 4 cm, and 5 cm triangle would also be a <b>right</b> triangle" not an acute triangle.
Lesson 107	06/27/2023	The central angle for the second problem on the worksheet is $60^\circ$ .

Lesson 108	07/06/2024	<p>An explanation has been added to address the true/false statement "A hexagon with congruent sides is always a regular polygon" follows: <b>A regular hexagon must have congruent angles as well as congruent sides. See the hexagon below with congruent sides but no congruent angles.</b></p>																																				
Lesson 109	05/19/2017	<p>The answer to the first problem in the warm up should be <b>35,564</b>, not 35,561.</p>																																				
Lesson 111 Worksheet 83	02/01/2025	<p>In the first table, the last row should have <b>1760 × n</b> faintly written, not 1760 – n, in the second column.</p>																																				
Lesson 115	03/10/2017	<p>Regarding the picture of the geometry solids, the manufacturer changed the solids and the triangular prism is now a <b>rectangular</b> prism. The new graphic is shown here.</p>	 <ul style="list-style-type: none"> <li>A Large cylinder</li> <li>B Triangular prism</li> <li>C Small cylinder</li> <li>D Square prism</li> <li>E Octagonal prism</li> <li>F Hexagonal prism</li> <li>G Cone</li> <li>H Cube</li> <li>I Sphere</li> <li>J Square pyramid</li> <li>K Rectangular prism</li> <li>L Hemisphere</li> </ul>																																			
Lesson 115	12/14/2019	<p>The sample line plot for a leap year, A note was added, "<b>All leap years will have three months that start on the same day of the week because January, April, and July start on the same day.</b>" The most common day will depend on what calendar year is being considered.</p>	<p style="text-align: center;">First Day of the Months in a Leap Year</p> <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td></td> <td></td> <td></td> <td style="text-align: center;">X</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">X</td> <td></td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td></td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> </tr> <tr> <td style="text-align: center;">S</td> <td style="text-align: center;">M</td> <td style="text-align: center;">T</td> <td style="text-align: center;">W</td> <td style="text-align: center;">Th</td> <td style="text-align: center;">F</td> <td style="text-align: center;">S</td> </tr> </table>				X				X		X	X		X	X	X	X	X	X	X	X	X								S	M	T	W	Th	F	S
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Lesson 115	06/27/2023	<p>The graph for Problem 3 should have <b>another tickmark after the 3 with the "X" above that mark</b> as the measurement is 3-1/4, not 3-1/8. No mark should be at the 3-1/8 mark on the line.</p>																																				
Lesson 115 Worksheet 87	10/12/2023	<p>The last question has been changed to: What is the difference <b>in length</b> between the most frequent dimension and the next most frequent dimension?</p>																																				
Lesson 124	09/01/2025	<p>The older Safe-T Compass is being replaced by the newer Slide N' Measure Compass. See the instructions for both compasses with the attached <b>pdf</b>.</p>																																				
Lesson 124 Worksheet 96	03/10/2017	<p>Problem 3 should read "The diameter of the base is <b>4 units</b>" not 2 units. <b>PDF</b> is attached.</p>																																				
Lesson 125	03/10/2017	<p>Regarding the picture of the geometry solids, the manufacturer changed the solids and the triangular prism is now a <b>rectangular</b> prism. The new graphic is shown here.</p>	 <ul style="list-style-type: none"> <li>A Large cylinder</li> <li>B Triangular prism</li> <li>C Small cylinder</li> <li>D Square prism</li> <li>E Octagonal prism</li> <li>F Hexagonal prism</li> <li>G Cone</li> <li>H Cube</li> <li>I Sphere</li> <li>J Square pyramid</li> <li>K Rectangular prism</li> <li>L Hemisphere</li> </ul>																																			

Lesson 125	02/10/2023	In the solutions for the warm-up, the check number of 56 should be (2), not (7).																																																
Lesson 128	01/03/2019	The fourth paragraph on the second page has changed to read "Tell him to watch while you show him a procedure for finding the area. Make the $2 \times 3$ rectangle on the geoboard. Then touch any two <b>boundary</b> pegs with your non-writing hand. Count the <b>uncovered</b> boundary pairs then <b>add the</b> inside pegs <b>to find the area</b> . See the figures below."																																																
Lesson 130	12/28/2017	<p>The order of the columns in the two tables are changed to list <math>b, h, b \times h</math>, then Area.</p> <table border="1" style="display: inline-table; margin-right: 20px;"> <thead> <tr><th><math>b</math></th><th><math>h</math></th><th><math>b \times h</math></th><th>Area</th></tr> </thead> <tbody> <tr><td>4</td><td>1</td><td>4</td><td>2</td></tr> <tr><td>2</td><td>3</td><td>6</td><td>3</td></tr> <tr><td>5</td><td>4</td><td>20</td><td>10</td></tr> <tr><td>1</td><td>5</td><td>5</td><td><math>2\frac{1}{2}</math></td></tr> <tr><td>2</td><td>4</td><td>8</td><td>4</td></tr> <tr><td>3</td><td>6</td><td>18</td><td>9</td></tr> </tbody> </table> <table border="1" style="display: inline-table;"> <thead> <tr><th><math>b</math></th><th><math>h</math></th><th><math>b \times h</math></th><th>Area</th></tr> </thead> <tbody> <tr><td>3</td><td>2</td><td>6</td><td>3</td></tr> <tr><td>2</td><td>3</td><td>6</td><td>3</td></tr> <tr><td>5</td><td>3</td><td>15</td><td><math>7\frac{1}{2}</math></td></tr> <tr><td>3</td><td>1</td><td>3</td><td><math>1\frac{1}{2}</math></td></tr> </tbody> </table>	$b$	$h$	$b \times h$	Area	4	1	4	2	2	3	6	3	5	4	20	10	1	5	5	$2\frac{1}{2}$	2	4	8	4	3	6	18	9	$b$	$h$	$b \times h$	Area	3	2	6	3	2	3	6	3	5	3	15	$7\frac{1}{2}$	3	1	3	$1\frac{1}{2}$
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3	1	3	$1\frac{1}{2}$																																															
Lesson 130	03/21/2024	<p>The order of the first three rows has been changed to match the worksheet graphics.</p> <div style="text-align: center;">  <p><b>Problems 11 to 16.</b></p> <table border="1" style="margin: auto;"> <thead> <tr><th><math>b</math></th><th><math>h</math></th><th><math>b \times h</math></th><th>Area</th></tr> </thead> <tbody> <tr><td>2</td><td>3</td><td>6</td><td>3</td></tr> <tr><td>5</td><td>4</td><td>20</td><td>10</td></tr> <tr><td>4</td><td>1</td><td>4</td><td>2</td></tr> <tr><td>1</td><td>5</td><td>5</td><td><math>2\frac{1}{2}</math></td></tr> <tr><td>2</td><td>4</td><td>8</td><td>4</td></tr> <tr><td>3</td><td>6</td><td>18</td><td>9</td></tr> </tbody> </table> <p>How is the area of a triangle related to <math>b \times h</math>?  <b>The area of half of <math>b \times h</math>.</b></p> </div>	$b$	$h$	$b \times h$	Area	2	3	6	3	5	4	20	10	4	1	4	2	1	5	5	$2\frac{1}{2}$	2	4	8	4	3	6	18	9																				
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Lesson 132	12/28/2017	On the top of the second page, the fourth line's area of the parallelogram should be 4, not 6.																																																
Lesson 136	04/18/2018	The Quotient and Remainder game instructions should read: Place the <b>dividend</b> card, the multiplication card, first in the row, as shown below."																																																
Lesson 140    Worksheet 109	05/19/2017	The last question, number 159, should read " <b>Which is longer, 3 feet or 1 meter?</b> ", not 3 yards or 1 meter. <b>PDF</b> of the worksheet is attached. Correct answer is <b>1 meter</b> .																																																

# LESSON 28: REVIEW AND GAMES 2

## OBJECTIVES:

1. To review recent topics
2. To develop skills through playing math card games

## MATERIALS:

1. Worksheet 15-A or 15-B, Review 2
2. *Math Card Games* book, P34
3. Short Multiplication Table, Appendix p.1, if needed

## ACTIVITIES FOR TEACHING:

**Worksheet 15-A.** Give the children the worksheet. Tell them to listen to the problems and write the answers. Read each problem twice.

$$43 \times 10 \qquad 149 + 37 \qquad 70 \times 8$$

Tell them to complete the worksheet. Solutions are below.

<p>Write only the answers.</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="text-align: center;"><u>  430  </u></td></tr> <tr><td style="text-align: center;"><u>  186  </u></td></tr> <tr><td style="text-align: center;"><u>  560  </u></td></tr> </table> <p>Add or subtract. Use check numbers.</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">9575 (8)</td> <td style="text-align: center;">4763 (2)</td> <td style="text-align: center;">9515 (2)</td> <td style="text-align: center;">4012 (7)</td> </tr> <tr> <td style="text-align: center;">+ 5592 (3)</td> <td style="text-align: center;">+ 5251 (4)</td> <td style="text-align: center;">- 5592 (3)</td> <td style="text-align: center;">- 1802 (2)</td> </tr> <tr> <td style="text-align: center;"><b>15,167 (2)</b></td> <td style="text-align: center;"><b>10,014 (6)</b></td> <td style="text-align: center;"><b>3923 (8)</b></td> <td style="text-align: center;"><b>2210 (5)</b></td> </tr> </table> <p>Utah's population is two <u>million</u> nine hundred <u>thousand</u> eight hundred seventy-two.</p> <p>Underline the period names. Write the number using digits and commas. <u>  2,900,872  </u></p> <p>Fill in the blanks.</p> <table style="width: 100%;"> <tr><td><math>3 \times \underline{8} = 24</math></td></tr> <tr><td><math>8 \times \underline{8} = 64</math></td></tr> <tr><td><math>7 \times \underline{2} = 14</math></td></tr> <tr><td><math>\underline{4} \times 11 = 44</math></td></tr> <tr><td><math>\underline{6} \times 9 = 54</math></td></tr> <tr><td><math>6 \times \underline{4} = 24</math></td></tr> <tr><td><math>2 \times \underline{7} = 14</math></td></tr> </table> <p>Draw lines to match the expressions.</p> <table style="width: 100%;"> <tr><td><math>4 \times 4</math></td><td><math>16 \times 2</math></td></tr> <tr><td><math>8 \times 5</math></td><td><math>6 \times 5 + 6 \times 2</math></td></tr> <tr><td><math>8 \times 4</math></td><td><math>5 \times 5</math></td></tr> <tr><td><math>20 + 5</math></td><td><math>8 \times 2</math></td></tr> <tr><td><math>9 \times 7</math></td><td><math>6 \times 7 - 2</math></td></tr> <tr><td><math>6 \times 7</math></td><td><math>50 - 1</math></td></tr> <tr><td><math>32 \div 4</math></td><td><math>9 \times 6 + 2</math></td></tr> <tr><td><math>7 \times 7</math></td><td><math>70 - 7</math></td></tr> <tr><td><math>8 \times 7</math></td><td><math>2 \times 2 \times 2</math></td></tr> </table>	<u>  430  </u>	<u>  186  </u>	<u>  560  </u>	9575 (8)	4763 (2)	9515 (2)	4012 (7)	+ 5592 (3)	+ 5251 (4)	- 5592 (3)	- 1802 (2)	<b>15,167 (2)</b>	<b>10,014 (6)</b>	<b>3923 (8)</b>	<b>2210 (5)</b>	$3 \times \underline{8} = 24$	$8 \times \underline{8} = 64$	$7 \times \underline{2} = 14$	$\underline{4} \times 11 = 44$	$\underline{6} \times 9 = 54$	$6 \times \underline{4} = 24$	$2 \times \underline{7} = 14$	$4 \times 4$	$16 \times 2$	$8 \times 5$	$6 \times 5 + 6 \times 2$	$8 \times 4$	$5 \times 5$	$20 + 5$	$8 \times 2$	$9 \times 7$	$6 \times 7 - 2$	$6 \times 7$	$50 - 1$	$32 \div 4$	$9 \times 6 + 2$	$7 \times 7$	$70 - 7$	$8 \times 7$	$2 \times 2 \times 2$	<p>Write the answers.</p> <table style="width: 100%;"> <tr><td><math>582 + 69 = \underline{651}</math></td></tr> <tr><td><math>87 + \underline{113} = 200</math></td></tr> <tr><td><math>(6 \div 3) + (6 \div 2) = \underline{5}</math></td></tr> </table> <p>Solve the problem.</p> <p>Kendra wants to walk her dog for an hour. She has 25 minutes left to walk. How long has she walked so far?</p> <p style="text-align: center;"><b>w = walked so far</b></p> <p style="text-align: center;"><b>w + 25 = 60</b></p> <p style="text-align: center;"><b>w = 35 minutes</b></p> <p>Complete the magic square.</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr><td>14</td><td>5</td><td>1</td><td>7</td></tr> <tr><td>-1</td><td><b>7</b></td><td>8</td><td>13</td></tr> <tr><td><b>6</b></td><td><b>4</b></td><td>8</td><td><b>9</b></td></tr> <tr><td>8</td><td>11</td><td><b>10</b></td><td>-2</td></tr> </table>	$582 + 69 = \underline{651}$	$87 + \underline{113} = 200$	$(6 \div 3) + (6 \div 2) = \underline{5}$	14	5	1	7	-1	<b>7</b>	8	13	<b>6</b>	<b>4</b>	8	<b>9</b>	8	11	<b>10</b>	-2
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$\underline{6} \times 9 = 54$																																																												
$6 \times \underline{4} = 24$																																																												
$2 \times \underline{7} = 14$																																																												
$4 \times 4$	$16 \times 2$																																																											
$8 \times 5$	$6 \times 5 + 6 \times 2$																																																											
$8 \times 4$	$5 \times 5$																																																											
$20 + 5$	$8 \times 2$																																																											
$9 \times 7$	$6 \times 7 - 2$																																																											
$6 \times 7$	$50 - 1$																																																											
$32 \div 4$	$9 \times 6 + 2$																																																											
$7 \times 7$	$70 - 7$																																																											
$8 \times 7$	$2 \times 2 \times 2$																																																											
$582 + 69 = \underline{651}$																																																												
$87 + \underline{113} = 200$																																																												
$(6 \div 3) + (6 \div 2) = \underline{5}$																																																												
14	5	1	7																																																									
-1	<b>7</b>	8	13																																																									
<b>6</b>	<b>4</b>	8	<b>9</b>																																																									
8	11	<b>10</b>	-2																																																									

## EXPLANATIONS:

The Review worksheets each have two versions. The second version can be used in various ways: as a quiz, as a test, as a check after tutoring, as a placement for a child entering late, and so forth.

Ask the children to correct any errors in class.

See page iii, number 17 of "Some General Thoughts on Teaching Mathematics," for additional information.

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Write only the answers.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Write the answers.

$582 + 69 = \underline{\quad}$

$87 + \underline{\quad} = 200$

$(6 \div 3) + (6 \div 2) = \underline{\quad}$

Add or subtract. Use check numbers.

$$\begin{array}{r} 9575 \text{ ( )} \\ + 5592 \text{ ( )} \\ \hline \end{array}$$

$$\begin{array}{r} 4763 \text{ ( )} \\ + 5251 \text{ ( )} \\ \hline \end{array}$$

$$\begin{array}{r} 9515 \text{ ( )} \\ - 5592 \text{ ( )} \\ \hline \end{array}$$

$$\begin{array}{r} 4012 \text{ ( )} \\ - 1802 \text{ ( )} \\ \hline \end{array}$$

Utah's population is two million nine hundred thousand eight hundred seventy-two. Underline the period names. Write the number using digits and commas. \_\_\_\_\_

Fill in the blanks.

$3 \times \underline{\quad} = 24$

$8 \times \underline{\quad} = 64$

$7 \times \underline{\quad} = 14$

$\underline{\quad} \times 11 = 44$

$\underline{\quad} \times 9 = 54$

$6 \times \underline{\quad} = 24$

$2 \times \underline{\quad} = 14$

Solve the problem.

Kendra wants to walk her dog for an hour. She has 25 minutes left to walk. How long has she walked so far?

Draw lines to match the expressions.

$4 \times 4$	$16 \times 2$
$8 \times 5$	$6 \times 5 + 6 \times 2$
$8 \times 4$	$5 \times 5$
$20 + 5$	$8 \times 2$
$9 \times 7$	$6 \times 7 - 2$
$6 \times 7$	$50 - 1$
$32 \div 4$	$9 \times 6 + 2$
$7 \times 7$	$70 - 7$
$8 \times 7$	$2 \times 2 \times 2$

Complete the magic square.

14	5	1	7
-1		8	13
		8	
8	11		-2

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Warm-Up**

Do the arithmetic. Use check numbers.

$$\begin{array}{r} 7642 \text{ ( )} \\ + 2467 \text{ ( )} \\ \hline \end{array}$$

$$\begin{array}{r} 7642 \text{ ( )} \\ - 2467 \text{ ( )} \\ \hline \end{array}$$

$$\begin{array}{r} 764 \text{ ( )} \\ \times 8 \text{ ( )} \\ \hline \end{array}$$

$$\begin{array}{r} 2467 \text{ ( )} \\ \times 4 \text{ ( )} \\ \hline \end{array}$$

1. Divide the rectangles by drawing vertical lines. Draw the lines freehand.

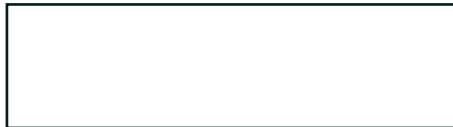
a. First find  $\frac{1}{2}$  of the rectangle.  
Then hatch  $\frac{1}{3}$  of  $\frac{1}{2}$ .



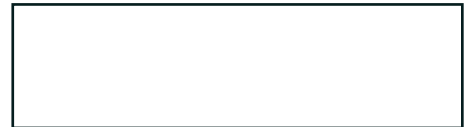
c. Find  $\frac{1}{2}$  of the rectangle.  
Then hatch  $\frac{3}{4}$  of  $\frac{1}{2}$ .



b. First find  $\frac{1}{3}$  of the rectangle.  
Then hatch  $\frac{1}{2}$  of  $\frac{1}{3}$ .



d. Find  $\frac{3}{4}$  of the rectangle.  
Then hatch  $\frac{1}{2}$  of  $\frac{3}{4}$ .



What pattern do you see? \_\_\_\_\_

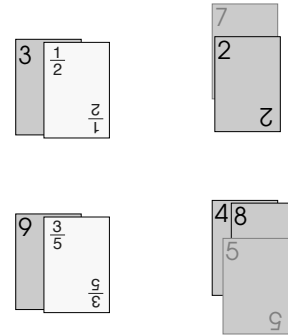
2. There are six rectangles below. Hatch  $\frac{2}{3}$  of 6 rectangles. How many thirds are hatched? \_\_\_\_\_



Now let's find  $\frac{2}{3} \times 6$  a different way. Hatch  $\frac{2}{3}$  of a rectangle. Repeat five more times.  
Do not leave any gaps between the thirds. How many thirds are hatched? \_\_\_\_\_



**Play:** The first player plays her cards to form all or part of the improper fractions. Any number of cards may be played per turn and to any row. Example shows  $7/2$  and  $48/5$ . The numerator and denominator may be played in either order.



The player completing a fraction takes the row, sets aside the basic number cards to be reused, and collects the fraction card.

A player unable to play forms a new mixed number by laying down one of his basic cards and one of the fraction cards from the stock.

Always keep at least two mixed numbers on the table; when a row is completed and collected, prepare new mixed numbers from the stock. Reuse the basic number cards if the stock becomes exhausted.

### F22.1 CORNERS WITH EIGHTHS

This is a fraction version of Corners Three (A38). The scoring is what makes this a fraction game; the numbers on the cards are considered to be eighths. The scoring provides practice in adding mixed numbers mentally.

**Objective:** To practice adding eighths and changing improper fractions to proper fractions without simplifying.

**Number of players:** Two to four.

**Cards:** The 50 Corners cards.

**Layout:** The stack of cards is placed face down on the table. Each player draws four cards initially and draws another card each time after playing a card. Players' cards are laid out face up in full view of all players.

**Object of the game:** To make the highest score.

**Play:** The rules of the game are the same as Corners Three (A38), except that the numbers on the cards are considered to be *eighths*.

Players do their own scoring. Most of the calculating can be done mentally. Following are some examples of scoring:

$$\text{Initially joining a 5 and 7: } \frac{12}{8} = 1\frac{4}{8}$$

$$\text{Next joining a 7 and 8: } 1\frac{4}{8} + \frac{15}{8} = 1\frac{19}{8} = 3\frac{3}{8}$$

$$\text{Next joining a 9 and 9: } 3\frac{3}{8} + \frac{18}{8} = 5\frac{5}{8}$$

### F22.2 CORNERS WITH TENTHS

This is another fraction version of Corners Three (A38). For scoring the numbers on the cards are considered to be tenths. The game is played like Corners with Eighths (F22.1) except the numbers on the cards are tenths.

### F22.3 SUBTRACTION CORNERS WITH EIGHTHS

To play this Corners subtraction game, players start with a certain value and subtract their scores. The winner is the first player to reach zero or the player with the lowest score if no one can play. The game is played like Corners with Eighths (F22.1).

The initial scores are as follows:

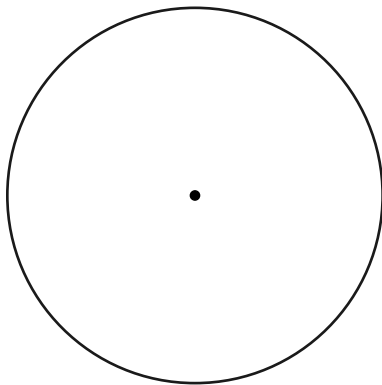
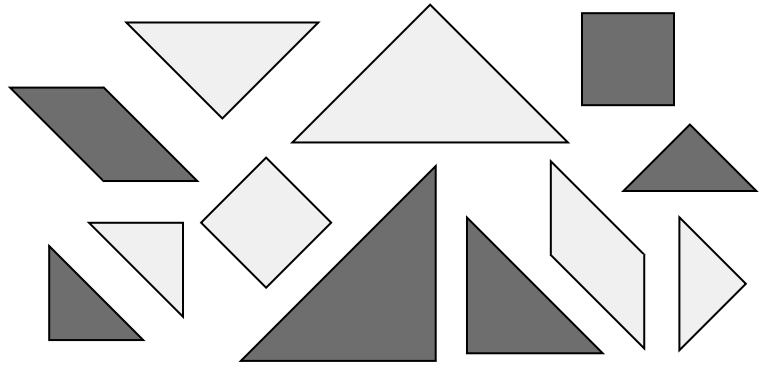
Number of players	2	3	4
Initial score	45	30	22

Name: \_\_\_\_\_

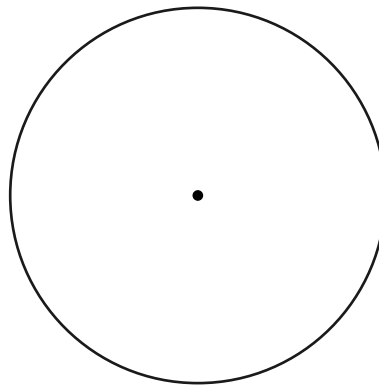
Date: \_\_\_\_\_

For the problems below, use the tangrams shown to find the percentage asked for.

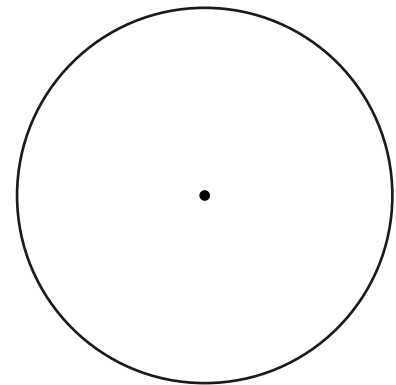
Use your percentage circle to show the answer, then record it below. Shade or hatch the circle so that it looks like the percentage circle answer.



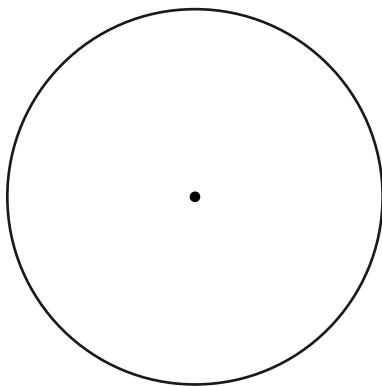
What percentage of the tangrams are in the darker color? \_\_\_\_\_



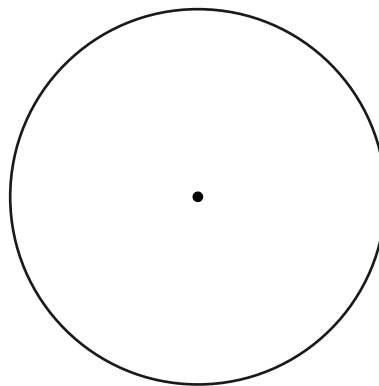
What percentage of the tangrams have right angles? \_\_\_\_\_



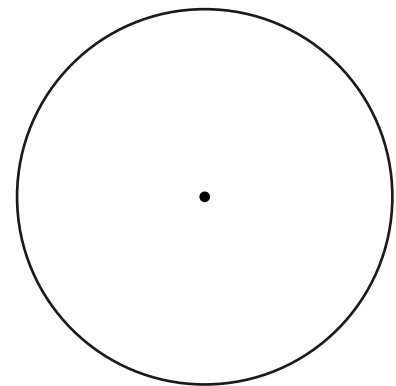
What percentage of the tangrams are triangles? \_\_\_\_\_



What percentage of the tangrams are quadrilaterals? \_\_\_\_\_



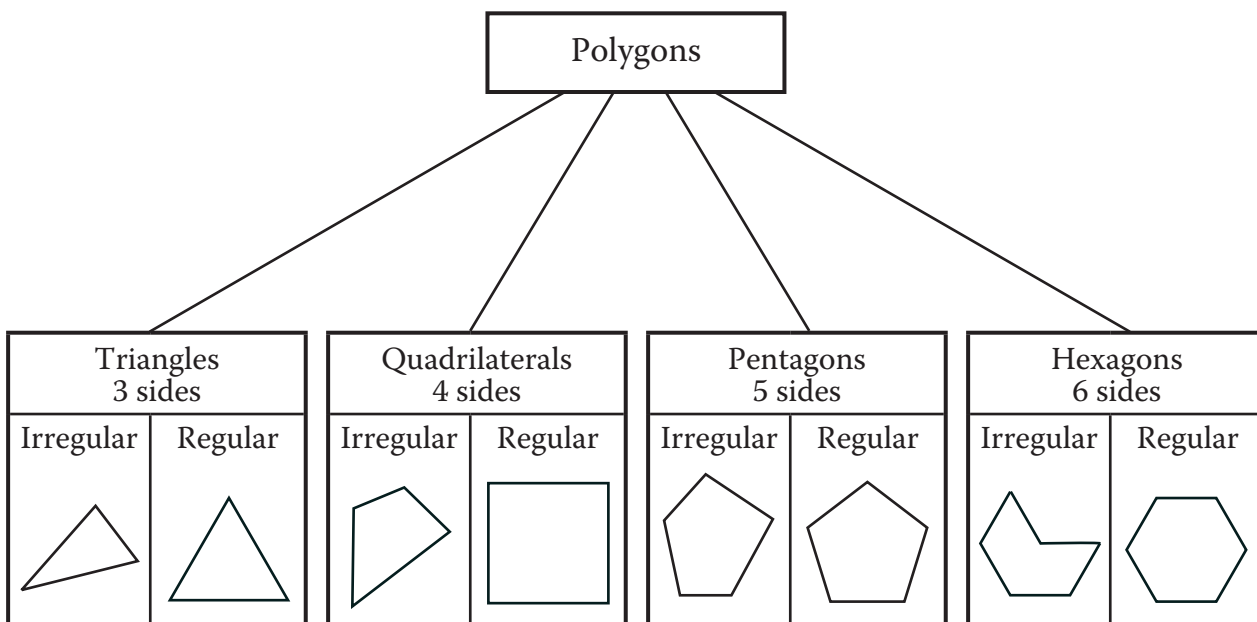
What percentage of the tangrams are polygons? \_\_\_\_\_



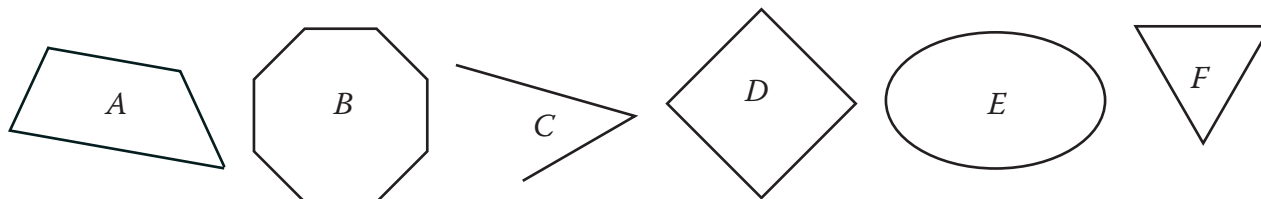
What percentage of the tangrams are rhombuses? \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_



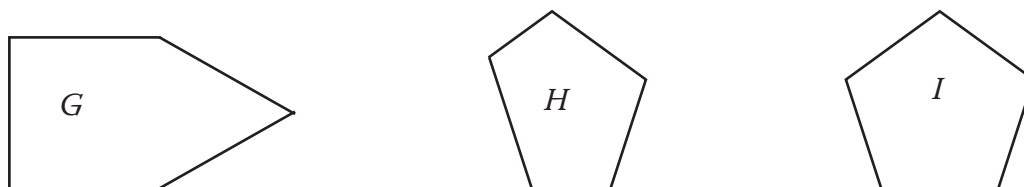
1. Which of the figures below are polygons? \_\_\_\_\_



2. Explain why the others are not polygons. \_\_\_\_\_

\_\_\_\_\_

**INFORMATION:** A *regular polygon* has congruent sides and congruent angles.



3. Which pentagons above have all sides congruent? \_\_\_\_\_
4. Which pentagons above have all angles congruent? \_\_\_\_\_
5. Which pentagons above are regular pentagons? \_\_\_\_\_
6. What is another name for a regular triangle? \_\_\_\_\_
7. What is another name for a regular quadrilateral? \_\_\_\_\_
8. Which of the polygons in the first question are regular polygons? \_\_\_\_\_

## SLIDE N' MEASURE COMPASS

NEW effective August 2025; used in RightStart Mathematics Levels E, F, G, and H

\*\* measures in inches and centimeters \*\*

The Slide N' Measure Compass will draw circles with radii from 1.3 to 12 cm and 1/2 inch to 4-11/16 inches.

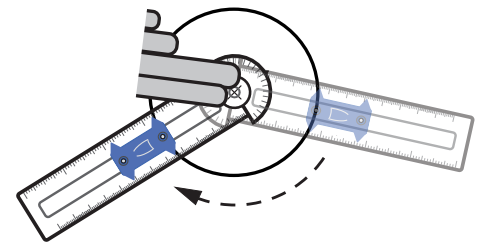
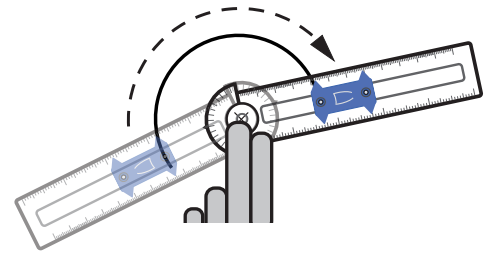
Align the center of the circle part of the compass with the center mark of your circle and hold it with your non-writing hand. Place the radius arm to the left. See the first figure on the right.

Position the slide to point to the desired radius. Put your pencil in the hole for that radius, then draw the circle in a clockwise direction. If you are left-handed, start the radius arm on the right side and draw the circle counterclockwise.

When your circle is almost complete, raise the heel of your hand, and continue drawing the circle until you have completed it. See the second figure.

To make more accurate circles, keep your pencil perpendicular to the paper. Also, keep light pressure against the outside of the hole while drawing.

A demonstration on using the Slide N' Measure Compass can be found at [RightStartMath.com/geometry](http://RightStartMath.com/geometry).



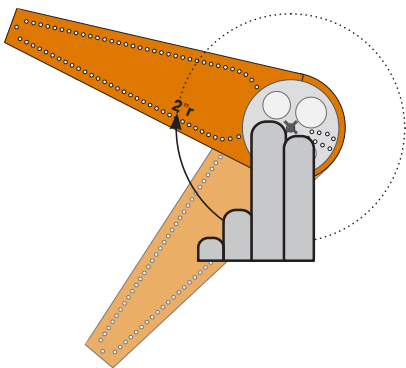
8/25

## SAFE-T COMPASS®

used prior to September 2025 in Levels E and F

\*\* measures in inches \*\*

Start by aligning the center of the white rotator over the center of the circle being drawn and hold it with your non-writing hand. Find the hole marked with the desired radius measurement and insert the pencil.



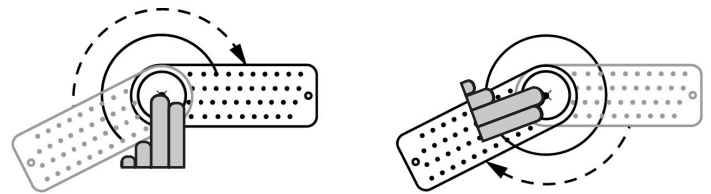
Keep the white rotator still and move the radius arm in an arc to draw the circle.

## mmARC COMPASS

used prior to August 2025 in Levels G and H

\*\* measures in millimeters \*\*

Align the center of the movable part of the compass, the rotator, with the center of your circle and hold it with your non-writing hand. Place the radius arm to the left.



Put the pencil in the hole for the desired radius, then draw the circle in a clockwise direction. When the circle is almost complete, raise the heel of the hand. See the second figure above.

If you are left-handed, start on the right side and draw the circle counterclockwise.

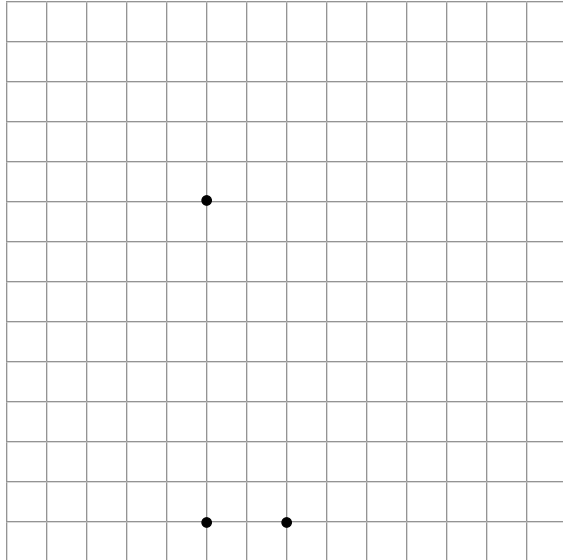
To make more accurate circles, keep your pencil perpendicular to the paper. Also, press against the outside of the hole while drawing.

A demonstration on using this compass can be found at [RightStartMath.com/geometry](http://RightStartMath.com/geometry).

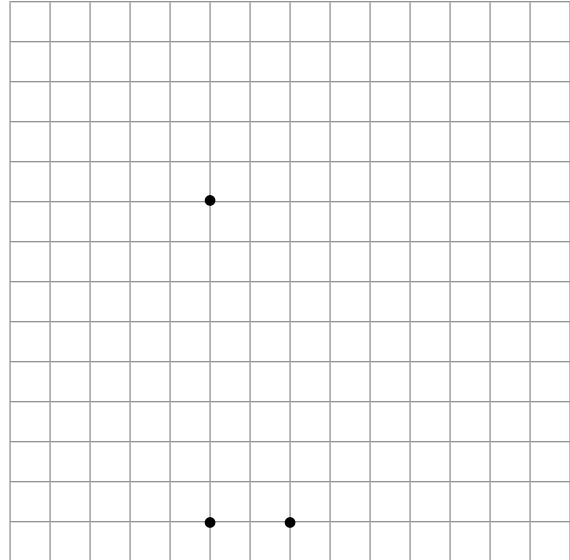
Name: \_\_\_\_\_

Date: \_\_\_\_\_

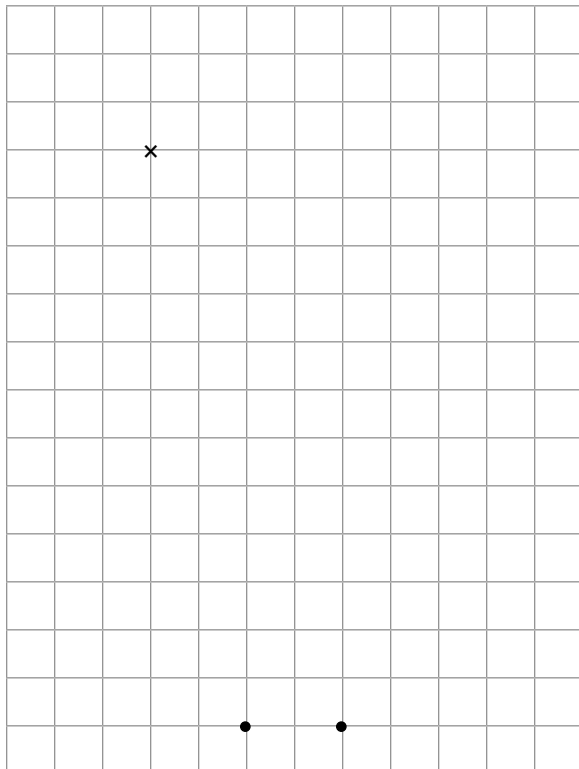
1. Draw the three views, top, front, and side, for a square pyramid that is 6 units high. The square base is 4 units on a side.



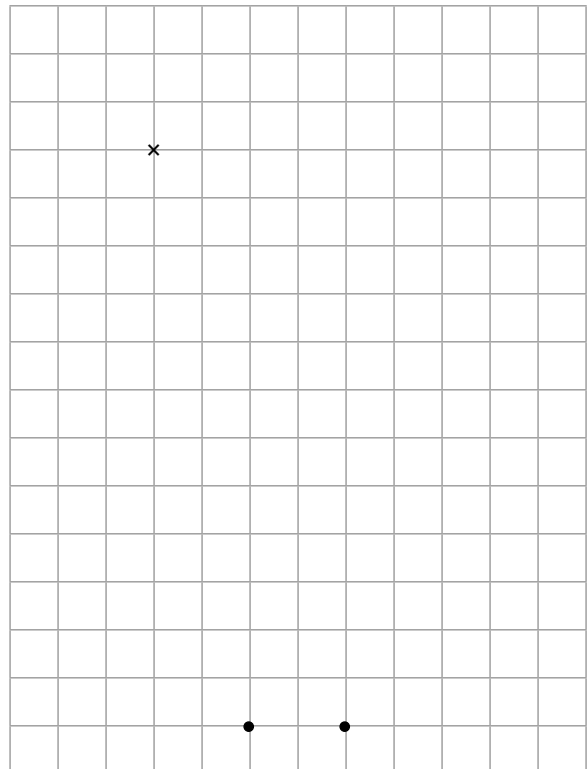
2. Draw the three views for the Problem 1 pyramid but now it is truncated so it is only 3 units high.



3. Draw the three views for a cone that is 8 units tall. The diameter of the base is 4 units. The "x" marks the center of the circle.



4. Draw the three views for the cone in Problem 3 but now it is truncated so it is now only 4 units tall. The "x" marks the center of the circle.

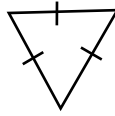


Name: \_\_\_\_\_

Date: \_\_\_\_\_

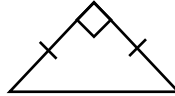
137-142. Draw lines to match each triangle by sides and angles.

Scalene triangle



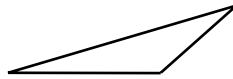
Obtuse triangle

Isosceles triangle



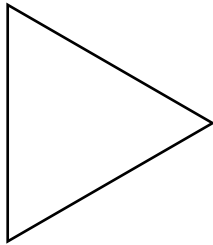
Right triangle

Equilateral triangle

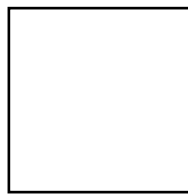


Acute triangle

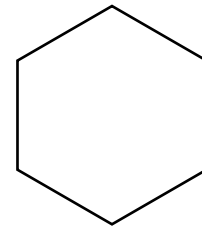
143-145. Draw all the lines of symmetry in the figures below and answer the questions.



How many lines of symmetry? \_\_\_\_\_



How many lines of symmetry? \_\_\_\_\_



How many lines of symmetry? \_\_\_\_\_

146-159. Fill in the blanks.

If you turn  $360^\circ$ , where will you end? \_\_\_\_\_

Name the angles in an isosceles right triangle. \_\_\_\_\_

What is special about the sides in an equilateral triangle. \_\_\_\_\_

How many angles does a hexagon have? \_\_\_\_\_

Can a rectangle also be a square? \_\_\_\_\_

Can a parallelogram be a square? \_\_\_\_\_

Can a polygon have only two sides? \_\_\_\_\_

How many inches are in 2 feet? \_\_\_\_\_

How many yards is 6 feet? \_\_\_\_\_

How many centimeters are in 2 decimeters? \_\_\_\_\_

How many decimeters are in a half a meter? \_\_\_\_\_

How many centimeters are in a meter? \_\_\_\_\_

How many milliliters are in a liter? \_\_\_\_\_

Which is longer, 3 feet or 1 meter? \_\_\_\_\_