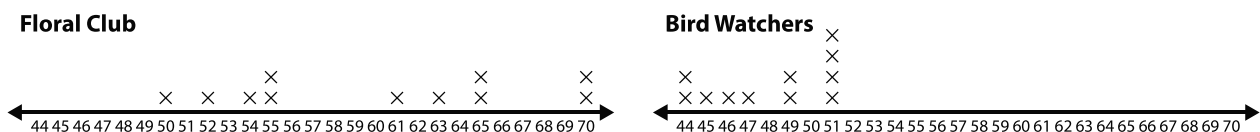
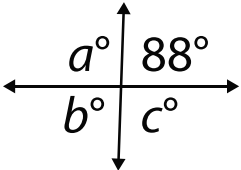
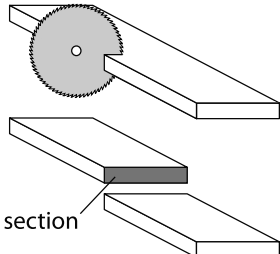
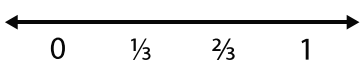


## Sample Lesson #3

1. Mrs. Thompson had 12 movie passes to give as prizes. She gave away 3 prizes this morning. Write and solve an inequality to show how many more passes she can give away. Create a number line and graph the solution. Explain your answer.
2. Find the values of  $a$ ,  $b$ , and  $c$ .
3. Holly has 4 swimsuits, 2 hats, and 3 pairs of flippers. Find the number of outfit combinations she has.
4. A scuba diver at the surface of the water dove 10 meters to watch a school of fish, and then dove 15 meters more. Which expression describes his movement?
5. Polly and 7 others went out to dinner. The food bill was \$200, and they gave a 20% tip. Polly estimated that each person's fair share was about \$30. Is this reasonable? Explain.
6. **A cross section is a face formed when you slice through a 3D object.** For example, consider the piece of lumber shown in the box. If you were to slice through it vertically, the face formed by the cut would be a cross section of the original lumber. Write your own definition of cross section in the answer box.
7. A building block set cost \$16.00. The same set a week later sold for \$19.00. What was the percent of increase? Round to the nearest tenth.
8. The bottoms of 80 craft sticks are painted for a game. There are 20 each of red, yellow, blue, or green sticks in a container. 36 players randomly chose a stick and then put it back. The table shows which colors were chosen. Give the theoretical probability and relative frequency for each of the four colors.
9. Find the radius of a circle that has an area of  $706.5 \text{ mm}^2$ .
10. Use long division to write the fraction  $-\frac{4}{5}$  as a decimal.
11. A container of marbles has 1 red, 1 blue, and 4 black. What is the probability that Frank will choose a black marble if he reaches into the container without looking inside? Plot the probability on the number line.
12. The dot plots show the ages of members of two clubs in a community. Which of these is an inference that can be made by studying the data shown here?



| <p>1.</p> <p>7.EE.4</p>  | <p>2.</p> <p>7.G.5</p>    |             |                    |             |                    |     |   |  |  |        |    |  |  |      |   |  |  |       |   |  |  |
|--|---|-------------|--------------------|-------------|--------------------|-----|---|--|--|--------|----|--|--|------|---|--|--|-------|---|--|--|
| <p>3.</p> <p>7.SP.8</p>  | <p>4.</p> <p>7.NS.1</p> <p>A) <math>-10 + (-15)</math></p> <p>B) <math>10 + (-15)</math></p>  |             |                    |             |                    |     |   |  |  |        |    |  |  |      |   |  |  |       |   |  |  |
| <p>5.</p> <p>7.EE.3</p>  | <p>6.</p> <p>7.G.3</p>   |             |                    |             |                    |     |   |  |  |        |    |  |  |      |   |  |  |       |   |  |  |
| <p>7.</p> <p>7.RP.3</p>  | <p>8.</p> <p>7.SP.6</p> <table border="1" data-bbox="885 1071 1396 1375"> <thead> <tr> <th>Color</th> <th>Qty</th> <th>Theoretical</th> <th>Relative Frequency</th> </tr> </thead> <tbody> <tr> <td>Red</td> <td>9</td> <td></td> <td></td> </tr> <tr> <td>Yellow</td> <td>18</td> <td></td> <td></td> </tr> <tr> <td>Blue</td> <td>3</td> <td></td> <td></td> </tr> <tr> <td>Green</td> <td>6</td> <td></td> <td></td> </tr> </tbody> </table> | Color       | Qty                | Theoretical | Relative Frequency | Red | 9 |  |  | Yellow | 18 |  |  | Blue | 3 |  |  | Green | 6 |  |  |
| Color  | Qty   | Theoretical | Relative Frequency |             |                    |     |   |  |  |        |    |  |  |      |   |  |  |       |   |  |  |
| Red  | 9   |             |                    |             |                    |     |   |  |  |        |    |  |  |      |   |  |  |       |   |  |  |
| Yellow   | 18  |             |                    |             |                    |     |   |  |  |        |    |  |  |      |   |  |  |       |   |  |  |
| Blue   | 3   |             |                    |             |                    |     |   |  |  |        |    |  |  |      |   |  |  |       |   |  |  |
| Green  | 6   |             |                    |             |                    |     |   |  |  |        |    |  |  |      |   |  |  |       |   |  |  |
| <p>9.</p> <p>7.G.4</p>   | <p>10.</p> <p>7.NS.2</p>  |             |                    |             |                    |     |   |  |  |        |    |  |  |      |   |  |  |       |   |  |  |
| <p>11.</p> <p>7.SP.5</p>  | <p>12.</p> <p>7.SP.4</p> <p>A) The floral club members are generally older than the bird watchers.</p> <p>B) People in their 60s are less interested in bird watching than they are in flower growing.</p> <p>C) Many in the floral club are also in the bird club.</p>   |             |                    |             |                    |     |   |  |  |        |    |  |  |      |   |  |  |       |   |  |  |