Rotations

Family Note If your child needs help with the following problems, consider putting up signs in a room in your home to indicate the directions *north, south, east,* and *west.* Do the turns with your child.

left turn right turn counterclockwise clockwise

Please return this Home Link to school tomorrow.

Make the turns described below. Show which way you face after each turn by:

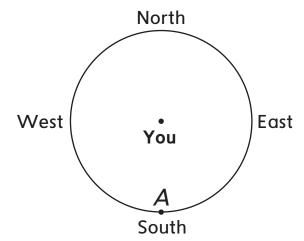


- Drawing a dot on the circle.
- Labeling the dot with a letter.

Example: Face north.

Do a $\frac{1}{2}$ turn counterclockwise.

On the circle, mark the direction you are facing with the letter *A*.



- 1 Face north. Do a $\frac{1}{4}$ turn clockwise. Mark the direction you are facing with the letter B.
- 3 Face east. Do a $\frac{1}{4}$ turn counterclockwise. Mark the direction you are facing with the letter D.
- Face north. Make a clockwise turn that \bigcirc is more than a $\frac{1}{2}$ turn but less than a $\frac{3}{4}$ turn. Mark the direction you are facing with the letter F.
- 2 Face north. Do a $\frac{3}{4}$ turn clockwise. Mark the direction you are facing with the letter C.
- Face west. Make less than a $\frac{1}{4}$ turn clockwise. Mark the direction you are facing with the letter E.
- Face north. Make a counterclockwise turn that is less than a $\frac{1}{2}$ turn but more than a $\frac{1}{4}$ turn. Mark the direction you are facing with the letter G.

Practice

7) 85 * 50 = _____

8 416 * 6 = _____

9 = 597 * 4

1,373 * 7 = _____