Relate Division and Multiplication

Let's explore the relationship between multiplication and division.

Warm-up

Number Talk: Multiply and Divide

Find the value of each expression mentally.

- $3 \times \frac{1}{2}$

- $3 \times \frac{2}{2}$

- $3 \times \frac{3}{2}$

- $5 \times \frac{3}{2}$

The Race

1. Lin and Han run a 3-mile relay race as a team. They each run the same distance. Draw a diagram to represent the situation.

2. Take turns describing to your partner how your diagrams represent the situation.

3. How far does each person run?

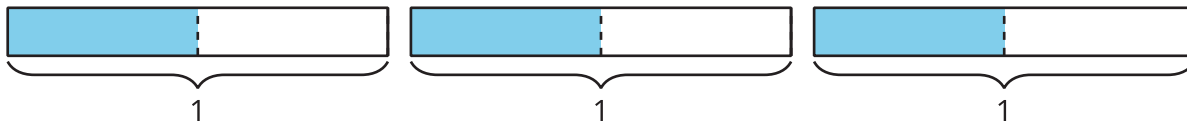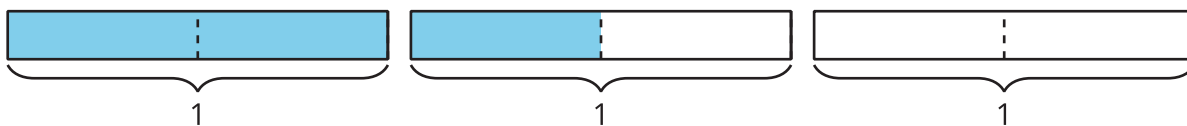## Where Do You See It?

Diagram A

Diagram B

Choose 1 diagram that you think best represents each expression. Describe how your chosen diagram represents that expression. Explain your reasoning.

1. $3 \times \frac{1}{2}$

2. $3 \div 2$

3. $\frac{1}{2} \times 3$