2016 Mathematics Standards of Learning Algebra Readiness Formative Assessment

6.5b

- 1. The height of a car is $46\frac{1}{4}$ inches. The toy model of that car is $2\frac{1}{2}$ inches tall. How many times greater is the height of the car than the height of its model? Express this quotient as a mixed number.
- 2. Kelsey filled 12 bags with either a red marble, yellow marble, or blue marble. One sixth of the bags included a red marble. Identify each scenario that could describe the remaining gift bags.

 $\frac{2}{3} \text{ of the total bags contain yellow marbles and 2 contain blue marbles.}$ $\frac{5}{12} \text{ of the total bags contain yellow marbles and } \frac{1}{3} \text{ contain blue marbles.}$ $\frac{1}{3} \text{ of the total bags contain yellow marbles and } \frac{1}{2} \text{ contain blue marbles.}$ $\frac{1}{2} \text{ of the total bags contain yellow marbles and 6 contain blue marbles.}$

- 3. Dean bought $4\frac{1}{2}$ gallons of gasoline to use in his lawnmower. If he uses $\frac{3}{4}$ gallon each time that he mows the yard, how many times can he mow the yard before he runs out of gasoline.
 - **A.** $3\frac{3}{4}$
 - **B.** $4\frac{3}{8}$
 - **C.** 5
 - **D.** 6

4. Each of Mrs. Malone's 16 students ate $\frac{3}{8}$ of a pizza. How many pizzas did they eat,

altogether?

- **A.** 6
- **B.** 8
- **C.** 10
- **D.** 12
- 5. On Monday Mr. Conner rode his bike for $\frac{2}{3}$ of an hour. On Tuesday he rode $\frac{5}{6}$ of an hour.

On Wednesday he rode $\frac{7}{12}$ of an hour. His goal had been to ride for three hours altogether. How much time was he short of his goal?

- A. $\frac{5}{6}$ hour
- **B.** $\frac{11}{12}$ hour
- **C.** $\frac{25}{12}$ hour
- **D.** $2\frac{1}{12}$ hour