## Fraction word problems

Diego, Roy, and Travis spent one sunny Saturday in their tree house to play marbles, cards, and cars.

1. Diego brought his bag of marbles and found that 4 of his 24 marbles are blue. What fraction of Diego's marbles is blue?
2. Roy also brought his bag of marbles. Of his 30 marbles, 10 are also blue. What fraction of Roy's marbles is blue?
3. Between Diego and Roy's collection of marbles, which of the two has a greater fraction of blue marbles?

4. Diego and Travis brought their hockey cards. Diego has 20 cards, 8 of which are members of the famous Hockmasters while Travis has 15 cards, 3 of which are members of the same team. Which of the two has the greater fraction of Hockmasters cards in their deck?
5. Roy and Travis brought their matchbox cars. Roy has 12 matchbox cars, 3 of which are red while Travis has 10 matchbox cars, 5 of which are also red. Which of the two has a greater fraction of red matchbox cars?

## Answers

1. 4 out of $24=\frac{4}{24}$ or simply $\frac{1}{6}$
$\frac{1}{6}$ of Diego's marbles are blue.
2. 10 out of $30=\frac{10}{30}$ or simply $\frac{1}{3}$
$\frac{1}{3}$ of Roy's marbles are blue.
3. $\frac{1}{3}$ is equivalent to $\frac{2}{6}, \frac{2}{6}>\frac{1}{6}$

Roy has the greater fraction of blue marbles.
4. Diego: 8 out of $20=\frac{8}{20}$ or $\frac{2}{5}$;

Roy: 3 out of $15=\frac{3}{15}$ or $\frac{1}{5}$
$\frac{2}{5}>\frac{1}{5}$; Diego has the greater fraction of the Hockmasters cards.
5. Roy: 3 out of $12=\frac{3}{12}$ or $\frac{1}{4}$;

Travis: 5 out of $10=\frac{5}{10}$ or $\frac{1}{2}$ or $\frac{2}{4}$
$\frac{2}{4}>\frac{1}{4}$; Travis has the greater fraction of red cars.

