Multiplying Fractions and Whole Numbers

You can find the product of a fraction and a whole number.

Tran needs $\frac{2}{3}$ yard of fabric to sew a pair of shorts. How many yards of fabric will Tran need to sew 6 pairs of shorts?

Step 1. Multiply the numerator by the whole number.

$$2 \times 6 = 12$$

Step 2. Place the product over the denominator. Simplify if possible.

$$\frac{12}{3} = 4$$
 yards of fabric

Remember: In word problems, "of" means "multiply."

Example:
$$\frac{3}{5}$$
 of $15 = \frac{3}{5} \times 15$

In questions 1–4, find each product. Simplify if possible.

1.
$$\frac{1}{3} \times 60 =$$

2.
$$\frac{3}{4}$$
 of 32 = _____

3.
$$\frac{7}{8} \times 40 =$$

4.
$$\frac{2}{7}$$
 of 35 = _____

For questions **5–7**, use the table to the right.

5. What is
$$\frac{1}{7}$$
 the speed of a cheetah?

6. What is
$$\frac{1}{5}$$
 the speed of a cat?

7. What is
$$\frac{1}{5}$$
 the speed of a jackal?

Animal	Speed (in mi/h)
Cat	30
Cheetah	70
Jackal	35