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.

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

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. $\frac{1}{3} \times 60 = \underline{20}$
2. $\frac{3}{4}$ of 32 $= \underline{24}$
3. $\frac{7}{8} \times 40 = \underline{35}$
4. $\frac{2}{7}$ of 35 $= \underline{10}$

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

5. What is $\frac{1}{7}$ the speed of a cheetah? $\underline{10}$
6. What is $\frac{1}{5}$ the speed of a cat? $\underline{6}$
7. What is $\frac{1}{5}$ the speed of a jackal? $\underline{7}$