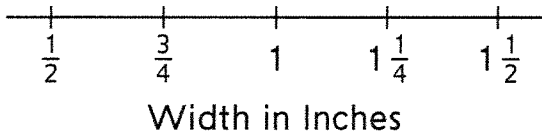


End-of-Year Assessment

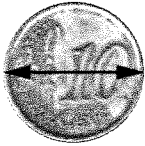
- ① Annabelle is measuring the widths of coins from around the world. Create a line plot using her measurement data.

Measures of World Coins

Measures of World Coins	
Measure	Number of Coins
$\frac{1}{2}$ in.	///
$\frac{3}{4}$ in.	//
1 in.	////
$1\frac{1}{4}$ in.	//
$1\frac{1}{2}$ in.	/



Measure the widths of these two coins to the nearest $\frac{1}{4}$ inch. Add the data to your line plot.



about _____ in.



about _____ in.

- ② Label each section of the fraction strip with a unit fraction.





End-of-Year Assessment (continued)

- ⑤ Jacob solved 6×7 like this: $(3 \times 7) + (3 \times 7) = 21 + 21 = 42$.
He solved 16×5 like this: $(8 \times 5) + (8 \times 5) = 40 + 40 = 80$.

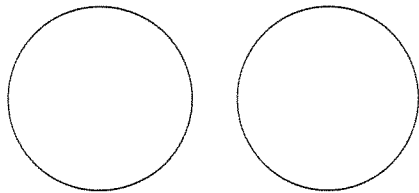
a. What is the same about Jacob's strategy for both problems?

b. Show how you can use Jacob's strategy to solve 8×9 .

c. Write another multiplication problem that you could solve using Jacob's strategy.

Explain how Jacob's strategy works for your problem.

- ⑥ a. Partition and shade the circles to show $\frac{2}{2} = \frac{6}{6}$.



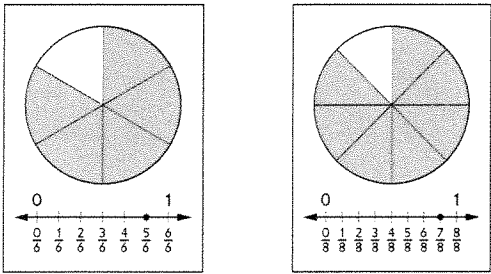
b. Explain why the circles shown above must be the same size.

End-of-Year Assessment (continued)

- ⑨ A collection of 6 movie tickets is shared equally among 3 families.
 How many tickets does each family get? _____ tickets
 What fraction of the collection of movie tickets does each family get?

Each family gets $\frac{\square}{\square}$ of the tickets.

- ⑩ During a game of *Fraction Memory*, Marta turns over these two cards:



She thinks she found a pair of equivalent fractions.

- a. Do you agree? Explain your thinking.

- b. Use your fraction cards to find a pair of equivalent fractions.
 Record your two fractions on the lines below.

_____ = _____

- c. How do you know the fractions are equivalent?



End-of-Year Assessment (continued)

- 13 a. Partition this number line into eighths. Label with fractions.



- b. Compare these fractions. Write $>$, $<$, or $=$ to make the number sentences true. Use your number line.

$$\frac{8}{8} \underline{\hspace{1cm}} 1$$

$$\frac{2}{8} \underline{\hspace{1cm}} \frac{1}{2}$$

- 14 Arjun has 12 eggs.
He uses 2 eggs for each omelet and makes 3 omelets.
How many eggs does he have left?

Write one or more number models that match the story.
Use a letter for what you are trying to find out.

The letter $\underline{\hspace{1cm}}$ represents $\underline{\hspace{10cm}}$.

$\underline{\hspace{10cm}}$
(number model(s) with letter)

Arjun has $\underline{\hspace{2cm}}$ left.
(unit)

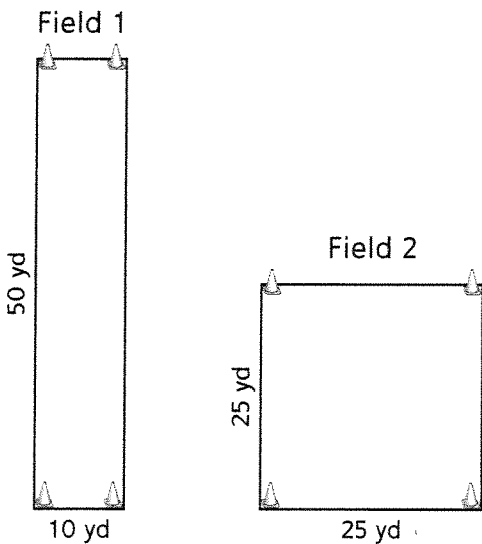
Check whether your answer makes your number model(s) true.
Write your number model(s) with your answer.

$\underline{\hspace{10cm}}$

**End-of-Year Assessment** (continued)

- 20 Two third-grade teams run races at Field Day. They run around the rectangular fields marked with cones and compare times.

Gabriel says that the race is not fair because the distance around Field 1 is longer. Find the perimeter of each field.



Perimeter of Field 1: _____
(unit)

Perimeter of Field 2: _____
(unit)

Is the race fair? Explain your answer.

Name _____

Multiplying by 2

Quiz



Directions: Find the missing product.

$2 \times 7 = \underline{\quad}$

$2 \times 8 = \underline{\quad}$

$2 \times 4 = \underline{\quad}$

$2 \times 5 = \underline{\quad}$

$2 \times 3 = \underline{\quad}$

$2 \times 0 = \underline{\quad}$

$2 \times 9 = \underline{\quad}$

$2 \times 12 = \underline{\quad}$

$2 \times 6 = \underline{\quad}$

$2 \times 1 = \underline{\quad}$

$2 \times 10 = \underline{\quad}$

$2 \times 2 = \underline{\quad}$

Directions: Find the missing factor.

$2 \times \underline{\quad} = 2$

$2 \times \underline{\quad} = 16$

$2 \times \underline{\quad} = 0$

$2 \times \underline{\quad} = 12$

$2 \times \underline{\quad} = 4$

$2 \times \underline{\quad} = 10$

$2 \times \underline{\quad} = 24$

$2 \times \underline{\quad} = 18$

$2 \times \underline{\quad} = 20$

$2 \times \underline{\quad} = 6$

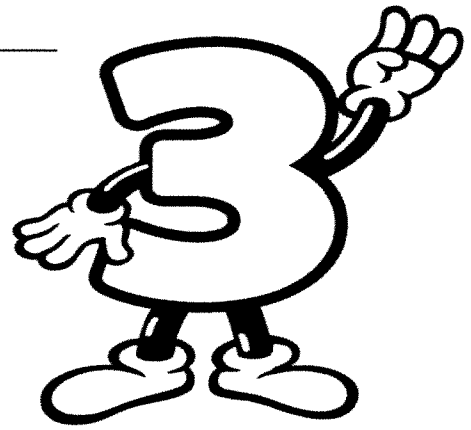
$2 \times \underline{\quad} = 14$

$2 \times \underline{\quad} = 8$

Name _____

Multiplying by 3

Quiz



Directions: Find the missing product.

$3 \times 7 = \underline{\quad}$

$3 \times 8 = \underline{\quad}$

$3 \times 6 = \underline{\quad}$

$3 \times 1 = \underline{\quad}$

$3 \times 10 = \underline{\quad}$

$3 \times 2 = \underline{\quad}$

$3 \times 3 = \underline{\quad}$

$3 \times 4 = \underline{\quad}$

$3 \times 0 = \underline{\quad}$

$3 \times 9 = \underline{\quad}$

$3 \times 12 = \underline{\quad}$

$3 \times 5 = \underline{\quad}$

Directions: Find the missing factor.

$3 \times \underline{\quad} = 21$

$3 \times \underline{\quad} = 3$

$3 \times \underline{\quad} = 0$

$3 \times \underline{\quad} = 33$

$3 \times \underline{\quad} = 6$

$3 \times \underline{\quad} = 36$

$3 \times \underline{\quad} = 15$

$3 \times \underline{\quad} = 9$

$3 \times \underline{\quad} = 27$

$3 \times \underline{\quad} = 30$

$3 \times \underline{\quad} = 12$

$3 \times \underline{\quad} = 18$

Name _____



Multiplying by 4

Quiz

Directions: Find the missing product.

$4 \times 1 = \underline{\quad}$

$4 \times 10 = \underline{\quad}$

$4 \times 2 = \underline{\quad}$

$4 \times 3 = \underline{\quad}$

$4 \times 4 = \underline{\quad}$

$4 \times 0 = \underline{\quad}$

$4 \times 7 = \underline{\quad}$

$4 \times 8 = \underline{\quad}$

$4 \times 6 = \underline{\quad}$

$4 \times 9 = \underline{\quad}$

$4 \times 12 = \underline{\quad}$

$4 \times 5 = \underline{\quad}$

Directions: Find the missing factor.

$4 \times \underline{\quad} = 0$

$4 \times \underline{\quad} = 16$

$4 \times \underline{\quad} = 4$

$4 \times \underline{\quad} = 8$

$4 \times \underline{\quad} = 12$

$4 \times \underline{\quad} = 24$

$4 \times \underline{\quad} = 28$

$4 \times \underline{\quad} = 48$

$4 \times \underline{\quad} = 20$

$4 \times \underline{\quad} = 36$

$4 \times \underline{\quad} = 32$

$4 \times \underline{\quad} = 40$

Name _____



Multiplying by 5

Quiz

Directions: Find the missing product.

$5 \times 7 = \underline{\quad}$

$5 \times 8 = \underline{\quad}$

$5 \times 6 = \underline{\quad}$

$5 \times 3 = \underline{\quad}$

$5 \times 4 = \underline{\quad}$

$5 \times 0 = \underline{\quad}$

$5 \times 9 = \underline{\quad}$

$5 \times 12 = \underline{\quad}$

$5 \times 5 = \underline{\quad}$

$5 \times 1 = \underline{\quad}$

$5 \times 10 = \underline{\quad}$

$5 \times 2 = \underline{\quad}$

Directions: Find the missing factor.

$5 \times \underline{\quad} = 5$

$5 \times \underline{\quad} = 40$

$5 \times \underline{\quad} = 0$

$5 \times \underline{\quad} = 30$

$5 \times \underline{\quad} = 10$

$5 \times \underline{\quad} = 25$

$5 \times \underline{\quad} = 60$

$5 \times \underline{\quad} = 45$

$5 \times \underline{\quad} = 50$

$5 \times \underline{\quad} = 15$

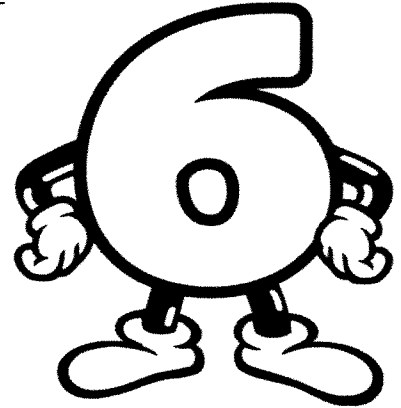
$5 \times \underline{\quad} = 35$

$5 \times \underline{\quad} = 20$

Name _____

Multiplying by 6

Quiz



Directions: Find the missing product.

$6 \times 3 = \underline{\quad}$

$6 \times 4 = \underline{\quad}$

$6 \times 0 = \underline{\quad}$

$6 \times 1 = \underline{\quad}$

$6 \times 10 = \underline{\quad}$

$6 \times 2 = \underline{\quad}$

$6 \times 7 = \underline{\quad}$

$6 \times 8 = \underline{\quad}$

$6 \times 6 = \underline{\quad}$

$6 \times 9 = \underline{\quad}$

$6 \times 11 = \underline{\quad}$

$6 \times 5 = \underline{\quad}$

Directions: Find the missing factor.

$6 \times \underline{\quad} = 6$

$6 \times \underline{\quad} = 36$

$6 \times \underline{\quad} = 0$

$6 \times \underline{\quad} = 30$

$6 \times \underline{\quad} = 12$

$6 \times \underline{\quad} = 18$

$6 \times \underline{\quad} = 48$

$6 \times \underline{\quad} = 66$

$6 \times \underline{\quad} = 60$

$6 \times \underline{\quad} = 54$

$6 \times \underline{\quad} = 42$

$6 \times \underline{\quad} = 24$

Name _____



Multiplying by 7

Quiz

Directions: Find the missing product.

$7 \times 9 = \underline{\quad}$

$7 \times 11 = \underline{\quad}$

$7 \times 5 = \underline{\quad}$

$7 \times 1 = \underline{\quad}$

$7 \times 10 = \underline{\quad}$

$7 \times 2 = \underline{\quad}$

$7 \times 3 = \underline{\quad}$

$7 \times 4 = \underline{\quad}$

$7 \times 0 = \underline{\quad}$

$7 \times 7 = \underline{\quad}$

$7 \times 8 = \underline{\quad}$

$7 \times 6 = \underline{\quad}$

Directions: Find the missing factor.

$7 \times \underline{\quad} = 7$

$7 \times \underline{\quad} = 21$

$7 \times \underline{\quad} = 35$

$7 \times \underline{\quad} = 14$

$7 \times \underline{\quad} = 49$

$7 \times \underline{\quad} = 0$

$7 \times \underline{\quad} = 56$

$7 \times \underline{\quad} = 77$

$7 \times \underline{\quad} = 70$

$7 \times \underline{\quad} = 28$

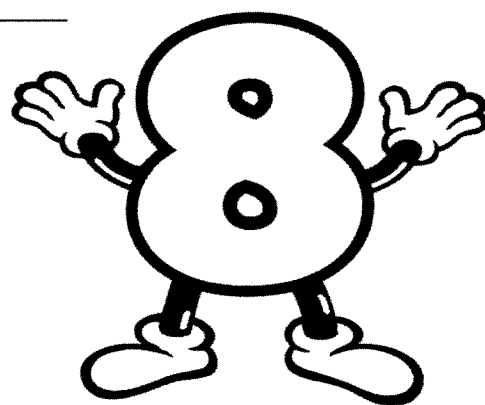
$7 \times \underline{\quad} = 63$

$7 \times \underline{\quad} = 42$

Name _____

Multiplying by 8

Quiz



Directions: Find the missing product.

$8 \times 9 = \underline{\quad}$

$8 \times 1 = \underline{\quad}$

$8 \times 5 = \underline{\quad}$

$8 \times 11 = \underline{\quad}$

$8 \times 3 = \underline{\quad}$

$8 \times 2 = \underline{\quad}$

$8 \times 10 = \underline{\quad}$

$8 \times 4 = \underline{\quad}$

$8 \times 0 = \underline{\quad}$

$8 \times 7 = \underline{\quad}$

$8 \times 8 = \underline{\quad}$

$8 \times 6 = \underline{\quad}$

Directions: Find the missing factor.

$8 \times \underline{\quad} = 8$

$8 \times \underline{\quad} = 24$

$8 \times \underline{\quad} = 40$

$8 \times \underline{\quad} = 16$

$8 \times \underline{\quad} = 56$

$8 \times \underline{\quad} = 0$

$8 \times \underline{\quad} = 32$

$8 \times \underline{\quad} = 48$

$8 \times \underline{\quad} = 88$

$8 \times \underline{\quad} = 56$

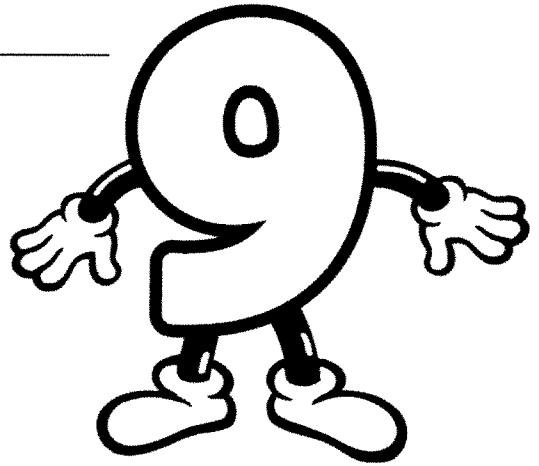
$8 \times \underline{\quad} = 72$

$8 \times \underline{\quad} = 80$

Name _____

Multiplying by 9

Quiz



Directions: Find the missing product.

$9 \times 1 = \underline{\quad}$

$9 \times 10 = \underline{\quad}$

$9 \times 2 = \underline{\quad}$

$9 \times 3 = \underline{\quad}$

$9 \times 4 = \underline{\quad}$

$9 \times 0 = \underline{\quad}$

$9 \times 7 = \underline{\quad}$

$9 \times 8 = \underline{\quad}$

$9 \times 6 = \underline{\quad}$

$9 \times 9 = \underline{\quad}$

$9 \times 5 = \underline{\quad}$

$9 \times 11 = \underline{\quad}$

Directions: Find the missing factor.

$9 \times \underline{\quad} = 0$

$9 \times \underline{\quad} = 81$

$9 \times \underline{\quad} = 63$

$9 \times \underline{\quad} = 27$

$9 \times \underline{\quad} = 9$

$9 \times \underline{\quad} = 18$

$9 \times \underline{\quad} = 45$

$9 \times \underline{\quad} = 99$

$9 \times \underline{\quad} = 90$

$9 \times \underline{\quad} = 54$

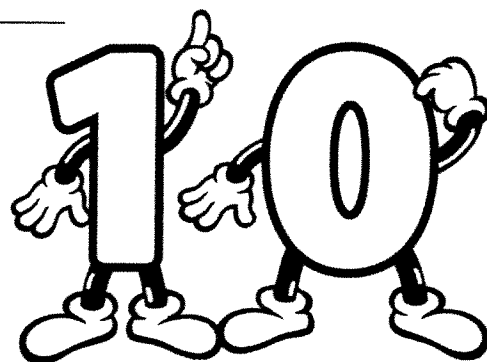
$9 \times \underline{\quad} = 36$

$9 \times \underline{\quad} = 72$

Name _____

Multiplying by 10

Quiz



Directions: Find the missing product.

$10 \times 7 = \underline{\quad}$

$10 \times 8 = \underline{\quad}$

$10 \times 6 = \underline{\quad}$

$10 \times 3 = \underline{\quad}$

$10 \times 4 = \underline{\quad}$

$10 \times 0 = \underline{\quad}$

$10 \times 1 = \underline{\quad}$

$10 \times 10 = \underline{\quad}$

$10 \times 2 = \underline{\quad}$

$10 \times 9 = \underline{\quad}$

$10 \times 12 = \underline{\quad}$

$10 \times 5 = \underline{\quad}$

Directions: Find the missing factor.

$10 \times \underline{\quad} = 50$

$10 \times \underline{\quad} = 40$

$10 \times \underline{\quad} = 70$

$10 \times \underline{\quad} = 90$

$10 \times \underline{\quad} = 20$

$10 \times \underline{\quad} = 110$

$10 \times \underline{\quad} = 30$

$10 \times \underline{\quad} = 10$

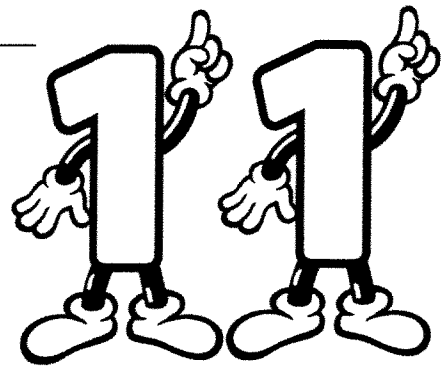
$10 \times \underline{\quad} = 100$

$10 \times \underline{\quad} = 0$

$10 \times \underline{\quad} = 80$

$10 \times \underline{\quad} = 120$

Name _____



Multiplying by 11

Quiz

Directions: Find the missing product.

$11 \times 1 = \underline{\quad}$

$11 \times 7 = \underline{\quad}$

$11 \times 6 = \underline{\quad}$

$11 \times 5 = \underline{\quad}$

$11 \times 4 = \underline{\quad}$

$11 \times 5 = \underline{\quad}$

$11 \times 2 = \underline{\quad}$

$11 \times 3 = \underline{\quad}$

$11 \times 8 = \underline{\quad}$

$11 \times 9 = \underline{\quad}$

$11 \times 11 = \underline{\quad}$

$11 \times 10 = \underline{\quad}$

Directions: Find the missing factor.

$11 \times \underline{\quad} = 44$

$11 \times \underline{\quad} = 0$

$11 \times \underline{\quad} = 88$

$11 \times \underline{\quad} = 11$

$11 \times \underline{\quad} = 110$

$11 \times \underline{\quad} = 55$

$11 \times \underline{\quad} = 33$

$11 \times \underline{\quad} = 22$

$11 \times \underline{\quad} = 99$

$11 \times \underline{\quad} = 121$

$11 \times \underline{\quad} = 77$

$11 \times \underline{\quad} = 66$

Name _____

Multiplying by 12

Quiz



Directions: Find the missing product.

$12 \times 5 = \underline{\quad}$

$12 \times 7 = \underline{\quad}$

$12 \times 6 = \underline{\quad}$

$12 \times 3 = \underline{\quad}$

$12 \times 4 = \underline{\quad}$

$12 \times 11 = \underline{\quad}$

$12 \times 2 = \underline{\quad}$

$12 \times 10 = \underline{\quad}$

$12 \times 8 = \underline{\quad}$

$12 \times 9 = \underline{\quad}$

$12 \times 12 = \underline{\quad}$

$12 \times 1 = \underline{\quad}$

Directions: Find the missing factor.

$12 \times \underline{\quad} = 60$

$12 \times \underline{\quad} = 108$

$12 \times \underline{\quad} = 24$

$12 \times \underline{\quad} = 84$

$12 \times \underline{\quad} = 132$

$12 \times \underline{\quad} = 72$

$12 \times \underline{\quad} = 144$

$12 \times \underline{\quad} = 36$

$12 \times \underline{\quad} = 12$

$12 \times \underline{\quad} = 96$

$12 \times \underline{\quad} = 48$

$12 \times \underline{\quad} = 120$

Name _____

Date _____

Multiplication Practice

Fill in the blanks

$1 \times 6 =$

$1 \times 2 =$

$1 \times 9 =$

$2 \times 7 =$

$2 \times 4 =$

$2 \times 10 =$

$3 \times 6 =$

$3 \times 12 =$

$3 \times 4 =$

$4 \times 7 =$

$4 \times 8 =$

$4 \times 4 =$

$5 \times 10 =$

$5 \times 5 =$

$5 \times 11 =$

$6 \times 6 =$

$6 \times 8 =$

$6 \times 12 =$

$7 \times 11 =$

$7 \times 6 =$

$7 \times 7 =$

$8 \times 9 =$

$8 \times 1 =$

$8 \times 12 =$

$9 \times 2 =$

$9 \times 10 =$

$9 \times 9 =$

$10 \times 4 =$

$10 \times 7 =$

$10 \times 11 =$

$11 \times 8 =$

$11 \times 2 =$

$11 \times 9 =$

$12 \times 2 =$

$12 \times 12 =$

$12 \times 6 =$