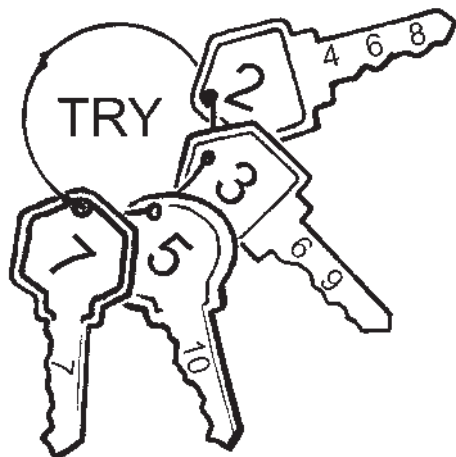## Keys to Finding Prime Numbers

You used four keys to find common factors and to reduce fractions. The same four keys will help you find prime numbers to 70.

Any whole number up to 70 that does not have 2, 3, 5, or 7 as a factor is a prime number. If one of these four keys is a factor, it is a composite number.

Is 49 a prime number?

Try 2. No, 2 is not a factor. Try 3. No. Try 5. No. Try 7. Yes.

Since 7 is a factor, 49 is not a prime number.

Put *P* for prime or *C* for composite. If you write *C*, also write a key factor that makes it composite. The first three are done for you.

1. a. 13 ___P___   **b.** 25 ___C 5___   **c.** 60 ___C 2, 3, 5___   **d.** 7 _____

2. a. 22 _____   **b.** 51 _____   **c.** 67 _____   **d.** 35 _____

3. a. 29 _____   **b.** 39 _____   **c.** 47 _____   **d.** 41 _____
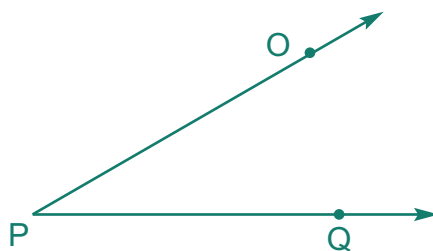
✎ We Remember

Write the answers.

4. a. 8 squared = _____   **b.** square root of 49 = _____

Follow the directions.

5. Name the angle. _____

6. Name the vertex. _____

7. Measure the angle. _____

△ 8. Draw a congruent angle. Label it *LMN.*

9. ∠OPQ is a/an **acute, right, obtuse** angle.

Find the LCM.

10. **a.** The LCM of 7 and 9 is _____.   **b.** The LCM of 4 and 6 is _____.

Write the first six multiples of 16.

11. _____ _____ _____ _____ _____ _____

Skill Builders +÷¯x

12. **a.** $9\overline{)949}$ **b.** $4\overline{)405}$ **c.** $9\overline{)762}$ **d.** $3\overline{)47}$ **e.** $\begin{array}{r} 2\,1\,4 \\ \times\ \ 3\,5 \\ \hline \end{array}$

13. **a.** $\begin{array}{r} 6\frac{3}{10} \\ -\ 4\frac{7}{10} \\ \hline \end{array}$ **b.** $\begin{array}{r} 17\frac{4}{7} \\ -\ 9\frac{6}{7} \\ \hline \end{array}$ **c.** $\begin{array}{r} 13 \\ -\ 9\frac{9}{16} \\ \hline \end{array}$ **d.** $\begin{array}{r} 7 \\ -\ 4\frac{4}{10} \\ \hline \end{array}$ **e.** $\begin{array}{r} 2\,0\,9 \\ \times\ \ 1\,3 \\ \hline \end{array}$

Lesson 6

14. Seven feet of snow fell on Buffalo in December. Another $2\frac{1}{2}$ feet fell in January. How many feet of snow fell during this period?

_____ _____

15. At 6:05 Mr. Noonan finished shoveling out his and Old Man Reuben's driveway. At 7:45 the snowplow came by and pushed a ridge of street snow up onto the clean driveways. How long did Mr. Noonan get to rest before he had to shovel out the street snow?

_____

Complete the chart.

	m and cm	m	cm
16.	1 m 6 cm		106 cm
17.			372 cm

Measure and round to the nearest fourth-inch.

18. _____ in   _____

19. _____ in   _____

Geometry is the study of points and the shapes they form. If you look around carefully you will see that God used many different shapes in creation.

Round to the nearest whole number.

20. a. 42.3 _____   **b.** 17.9 _____   **c.** 25.6 _____   **d.** 24.5 _____

Answer the questions about Set T.

> Set T = Things in Shateela's neighborhood

21. Is a tree a member of Set T? _____

22. Is a sidewalk a member of Set T? _____

23. Is a potato field a member of Set T? _____

△**24.** Name four more things that could be members of Set T. _____

_____

Simplify these expressions.

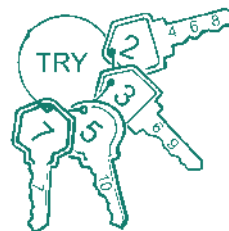**25. a.** $(4 \times 3) \div 2 + 4 - (4 \div 2)$ **b.** $3 + (9 \times 5) \div (5 + 4) - 3$ **c.** $4 + 2 - 6 \times 3 \div 9$

—— Mental Math . . ? ————————————————————

26. a. $100 - 15 =$ _____   **b.** $100 - 36 =$ _____   **c.** $75 +$ _____ $= 100$

27. a. $87 +$ _____ $= 100$ **b.** $3.3 \times 100 =$ _____   **c.** $50 +$ _____ $= 100$

Solve the prime number exercises.

28. The key factors for finding prime numbers are the same as the first four prime numbers. List them _____
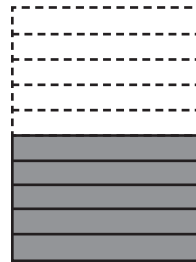
29. List the next four prime numbers. _____
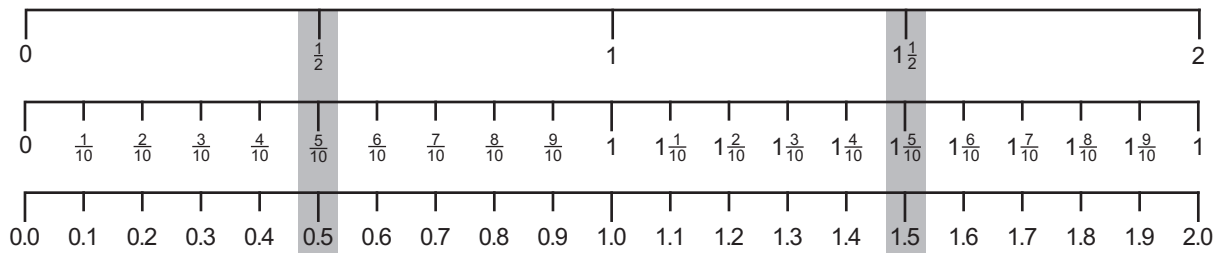
One-Half and Tenths

$\frac{1}{2}$

$\frac{5}{10}$

$\frac{1}{2}$ and $\frac{5}{10}$ name the same amount.

Study the number lines above.

1. Write two other names for $\frac{1}{2}$. _____ _____

2. Write two other names for 1.5. _____ _____

Write these fractions and mixed numbers as decimals.

3. a. $\frac{5}{10}$ _____   **b.** $6\frac{1}{2}$ _____   **c.** $1\frac{1}{2}$ _____

4. a. $\frac{1}{2}$ _____   **b.** $10\frac{5}{10}$ _____   **c.** $4\frac{5}{10}$ _____

We Remember

Write *P* for prime or *C* for composite. If you write *C*, write a key factor of the number.

5. a. 2 _____   **b.** 4 _____   **c.** 6 _____

6. There are 15 prime numbers less than 50. How many are there between 50 and 70? _____ (Look back at page 14 to help you.)

Write < or > .

```
←++++++++++++++++++++→
 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10
```

7. a. -26 ☐ 32   **b.** 5 ☐ -11   **c.** -2 ☐ -20   **d.** -9 ☐ 14

Measure to the eighth-inch.

8. _____ in   _____

Skill Builders $+\frac{-}{÷}$ x

9. a.
$$\begin{array}{r} 358 \\ \times\ 749 \\ \hline \end{array}$$

b. $7\overline{)\$49.77}$

c. $5\overline{)943}$

d. $6\overline{)\$495.06}$

10. a.
$$\begin{array}{r} 1 \\ \frac{7}{10} \\ -\ \ \ \\ \hline \end{array}$$

b.
$$\begin{array}{r} 323 \\ \times\ 723 \\ \hline \end{array}$$

c.
$$\begin{array}{r} 28 \\ \times\ 40 \\ \hline \end{array}$$

d.
$$\begin{array}{r} 63 \\ \times\ 26 \\ \hline \end{array}$$

e.
$$\begin{array}{r} 639 \\ \times\ \ \ \ 7 \\ \hline \end{array}$$

11.7 Little Darren and Kenneth built a snow fort
with snow bricks made from one of Mom's
bread pans. Together, the boys built a wall
that was 18 bricks long and 6 bricks tall.
How many snow bricks did the boys make?

_____ _____

12.7 Each brick was 4 inches high. How many inches high were the 6 bricks of the fort?

_____ _____   How many feet was this? _____ _____

13.7 The snow fell at a rate of 45 cm per hour.
How much snow fell in four hours?

_____ _____

This is the same as _____ meters.

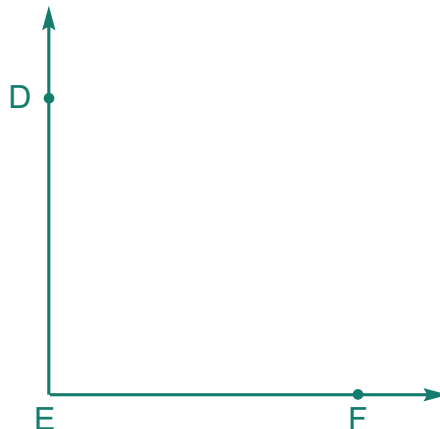Remember, you must move a decimal point
to change cm to m.

Solve.

	9 hr 10 min			7 hr 10 min
14. a.	– 3 hr 25 min		**b.**	– 2 hr 30 min

Follow the directions.

△**15.** Draw a congruent
angle and label
it *GHI.*

— Mental Math . . .?

16. a. 400 × 200 = ⎯⎯⎯⎯ **b.** 600 × 300 = ⎯⎯⎯⎯ **c.** 19 + 37 = ⎯⎯⎯

Round to the place value of the underlined number.

17. a. 6<u>5</u>9 ⎯⎯⎯ **b.** 2,<u>5</u>93 ⎯⎯⎯ **c.** 6,<u>1</u>95 ⎯⎯⎯

Find the average.

18. Shateela kept track of the birds that came to the bird feeder for three days. One day there were 28, the next day 43, and the third day 34. What was the average number of birds that came to the feeder each day?

⎯⎯⎯ ⎯⎯⎯

Add	Divide

Follow the instructions using the number *15,283,007.*

19. Write the digit in the millions place. ⎯⎯

20. Write the digit in the ten millions place. ⎯⎯

21. Write the digit in the thousands place. ⎯⎯

22. Write the digit in the hundreds place. ⎯⎯

Hurricanes can cause the water on the beach to rise 4 feet in just a few minutes. This can cause some very quick and dangerous floods.

Round each number to estimate.

23. a. estimate 987 × 321 **b.** estimate 49 × 305

⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯ ⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯

Write these fractions and mixed numbers as decimals.

24. a. $4\frac{5}{10}$ ⎯⎯ **b.** $8\frac{1}{2}$ ⎯⎯ **c.** $6\frac{5}{10}$ ⎯⎯