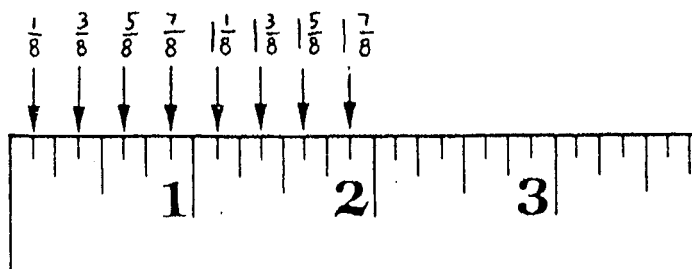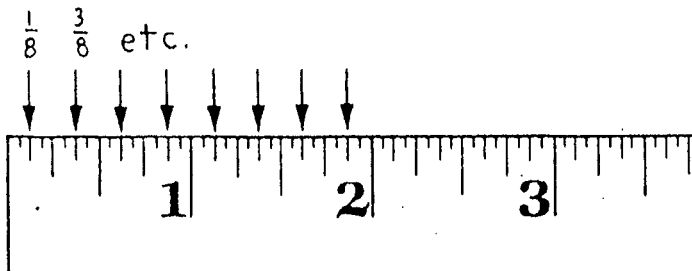# Measuring
2 Eighths of an Inch

On most rulers, there is an eighth-inch mark exactly halfway between each quarter-inch mark.

If the ruler is marked in eighths of an inch, the eighth-inch marks are the shortest ones:

If the ruler is marked in 16ths of an inch, then the eighth-inch marks are the next-to-the-shortest ones:
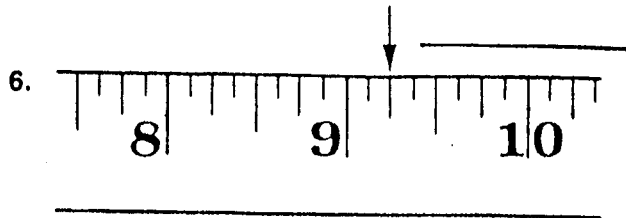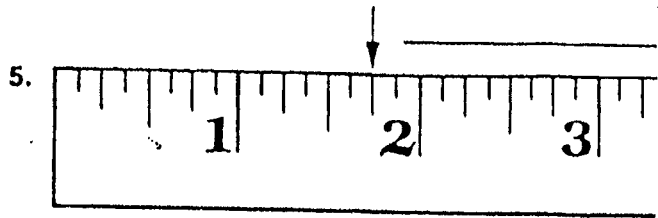

The eighth-inch marks are a little harder to read than the quarter-inch and half-inch marks. Until you get used to using a ruler, you may have to count the eighth-inch marks one by one until you come to the mark you want to identify.
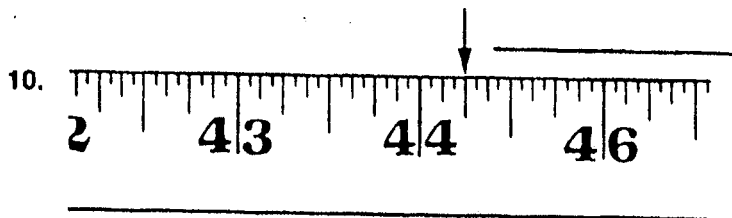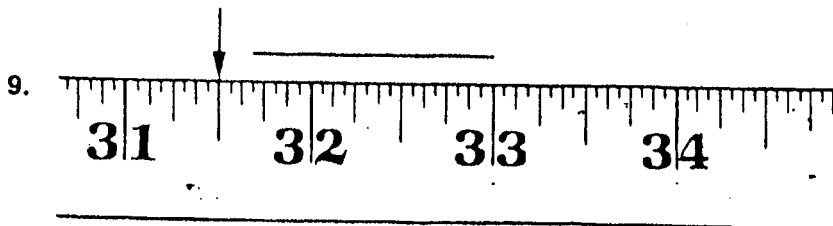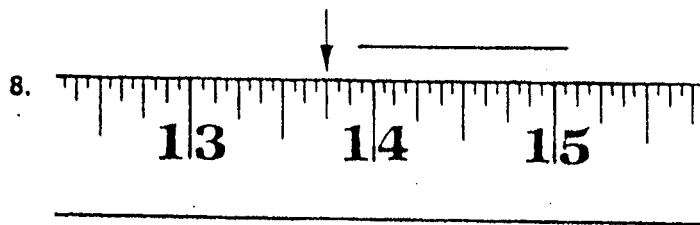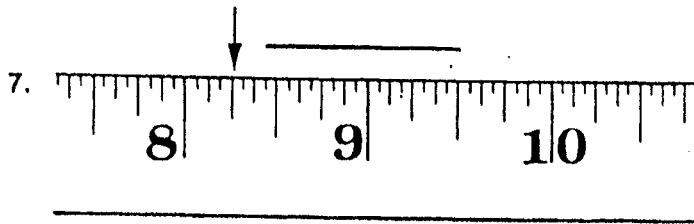
REMEMBER! When you count—

- $\frac{2}{8}$ in. is the same as $\frac{1}{4}$ in.

- $\frac{4}{8}$ in. is the same as $\frac{1}{2}$ in.

- $\frac{6}{8}$ in. is the same as $\frac{3}{4}$ in.

Look back at the drawings to see why this is so.

5.

6.

(Notice that the next four rulers are marked in 16ths of an inch.)
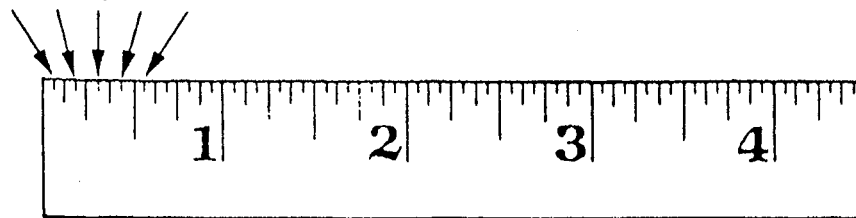
7.

8.

9.

10.

3 Measuring Sixteenths of an Inch

The smallest marks on most rulers are for 16ths of an inch.

$\frac{1}{16}$ $\frac{3}{16}$ $\frac{5}{16}$ $\frac{7}{16}$ $\frac{9}{16}$ and so on.

It's hard to read 16ths of an inch quickly until you have lots of practice. Until you do, the best way is just to count the marks.
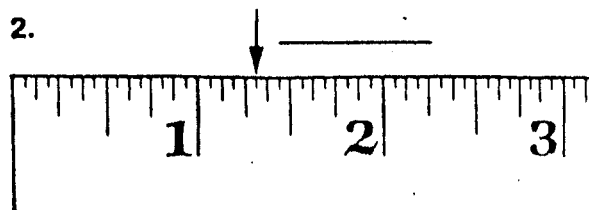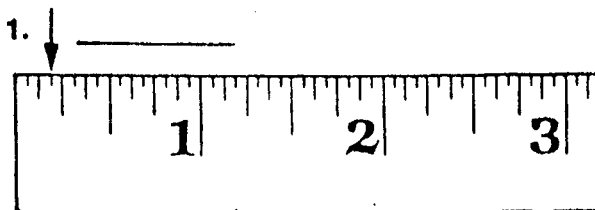
Remember, when you count, that:

• $\frac{2}{16}$ in. is the same as $\frac{1}{8}$ in.

• $\frac{4}{16}$ in. is the same as $\frac{1}{4}$ in.

• $\frac{6}{16}$ in. is the same as $\frac{3}{8}$ in.

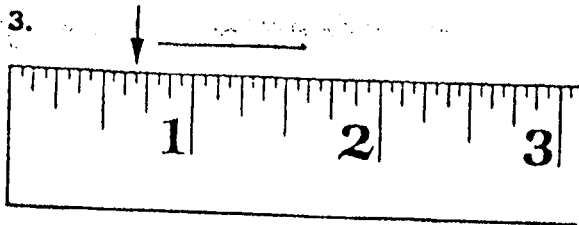• $\frac{8}{16}$ is the same as $\frac{1}{2}$ in. and so on.

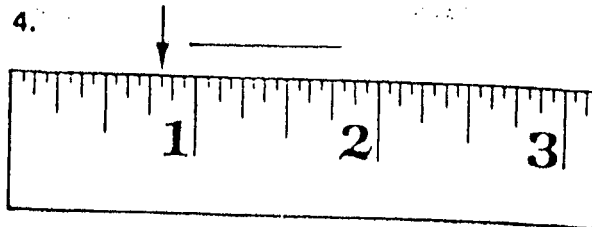Look at the drawing to see why this is so.

Exercises

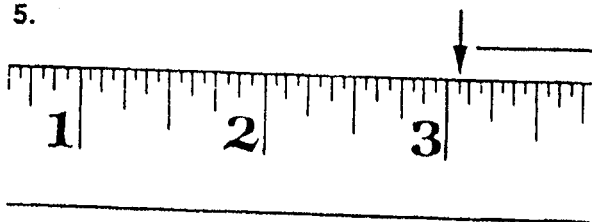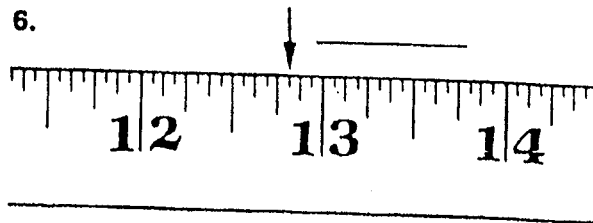In each of the following, what measurement does the arrow point to?
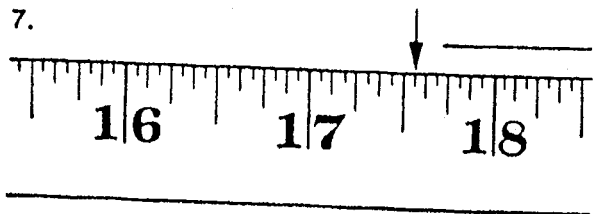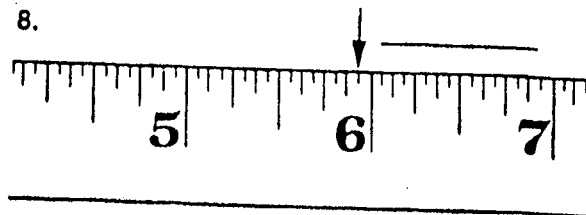
1.

2.

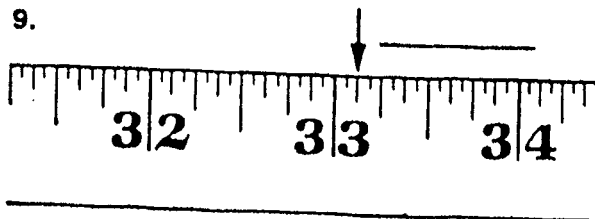**3.**
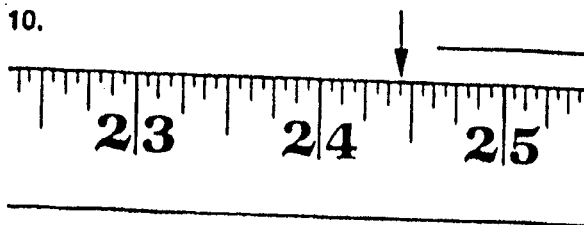
4.

5.

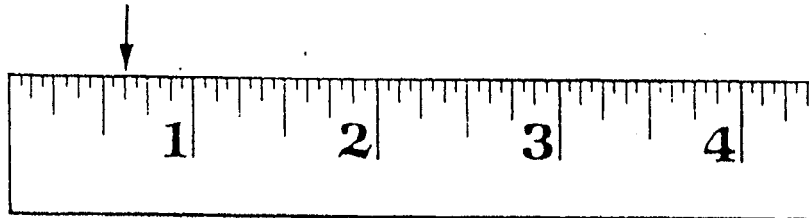**6.**

7.

8.

9.

10.

Halves, Quarters,
4   Eighths, and Sixteenths

When you read fractions of an inch on a ruler, follow these two steps:

- Look at the length of the fraction mark. Decide what kind of fraction the mark is for—a half an inch, or fourths, or eighths, or 16ths.

- Start at the end (or at an inch mark) and count the number of that kind of mark and any **longer marks.**
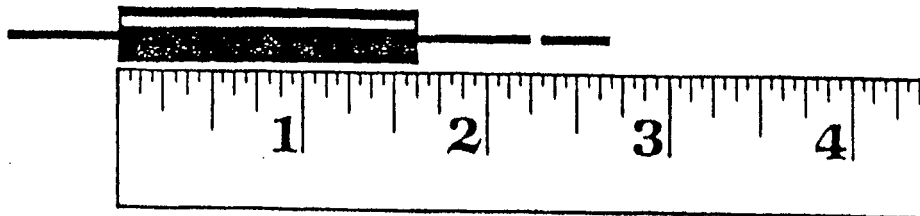
For example:

1. It's an eighth-inch mark.

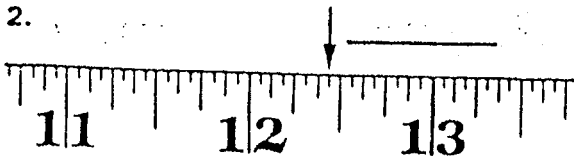2. It's number 5 from the end—$\frac{5}{8}$ in.

Exercises

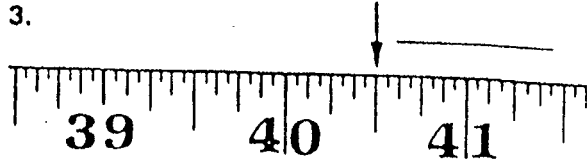1. You have to replace the drive roller on an office machine:

How long is it? _____

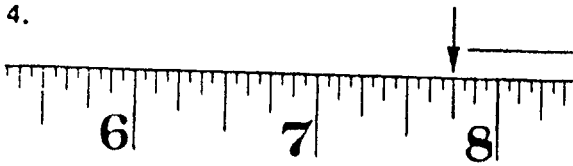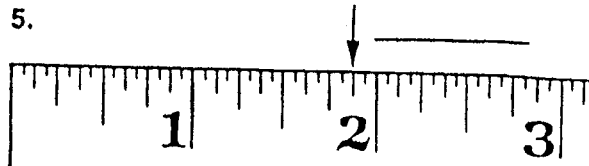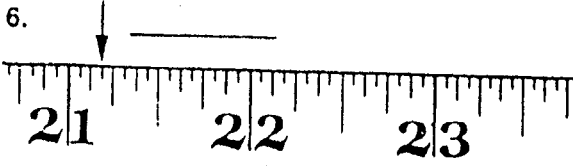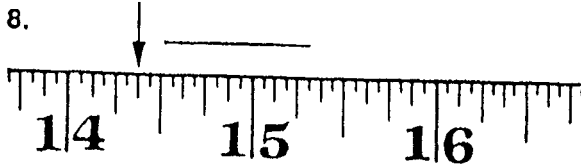In each of the following, what measurement does the arrow point to?

2.

11   12   13

_____

3.

39   40   41

_____

4.

6   7   8

_____

5.

1   2   3

6.

21   22   23

_____

7.

26   27   28

_____

8.

14   15   16

_____

9.

2   3   4

_____

10.

18   19   20   21

_____