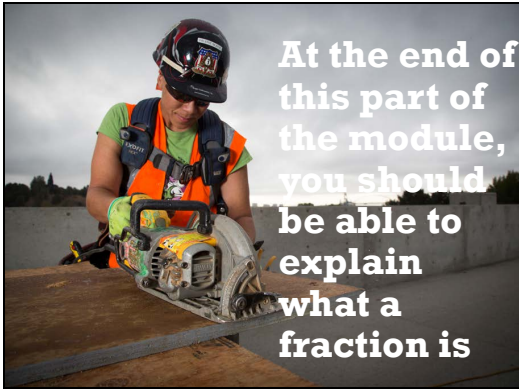
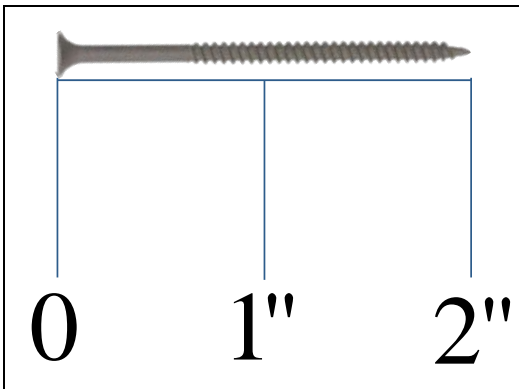
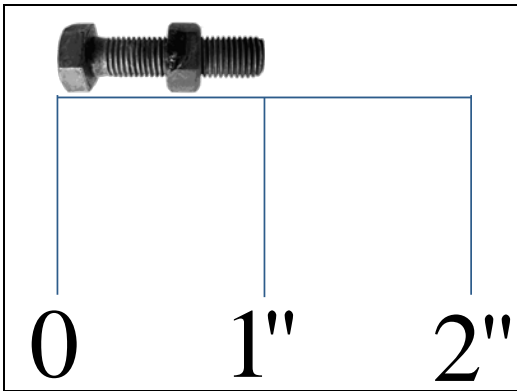


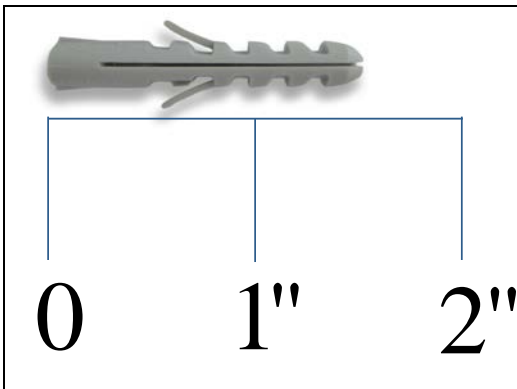
Fractions and Measurement Handout

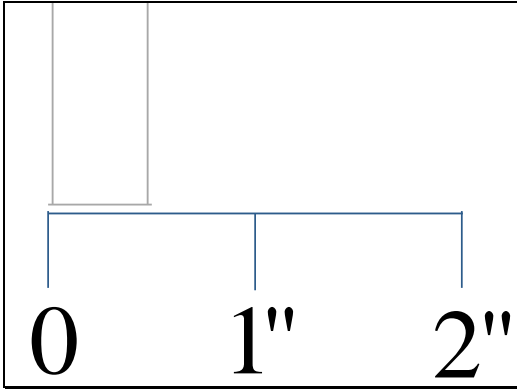
A
Fraction
is just an amount of something













One whole Hershey's bar



Less than one whole Hershey's bar







How many of those pieces will I get?

How many pieces will the chocolate bar be broken into?



How many pieces each person got

$\frac{1}{2}$

How many pieces the bar is broken into

2




How many pieces each person got

$\frac{1}{4}$

How many pieces the bar is broken into

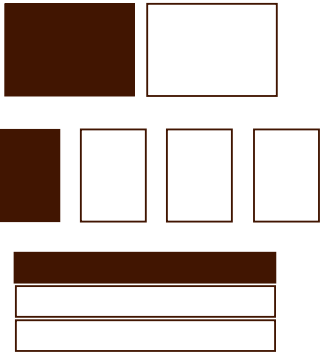
4



**How many pieces
each person got**

**How many pieces
the bar is broken
into**


$$\frac{1}{3}$$



$$\frac{1}{2}$$

$$\frac{1}{4}$$

$$\frac{1}{3}$$



**How many pieces
I got**

**How many pieces
the bar is broken
into**

$$\frac{2}{4}$$



How many pieces
I got

3

How many pieces
the bar is broken
into

4



How many pieces
I got

2

How many pieces
the bar is broken
into

3

How many
of those
things
there are



3

What is
being
counted



4

There are → $\frac{5}{8}$
five

Eighths →

There are → $\frac{7}{16}$
seven

Sixteenths →

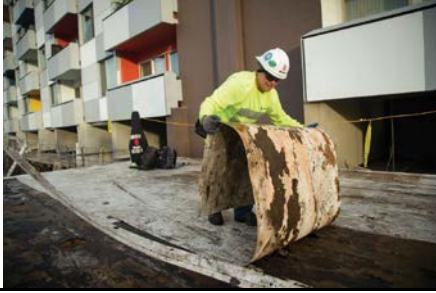
$\frac{1}{2} = 1/2 =$ “one-half”

$\frac{3}{4} = 3/4 =$ “three fourths”

$\frac{7}{8} = 7/8 =$ “seven eighths”



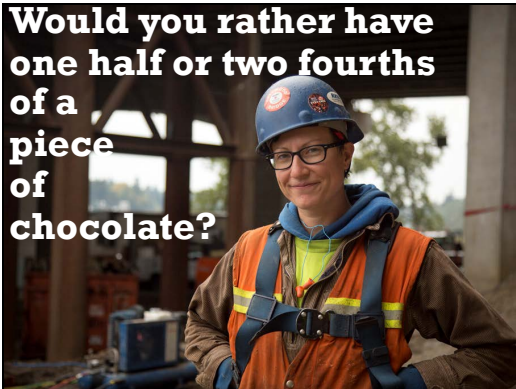
How many halves ($\frac{1}{2}$ s) make up one whole?



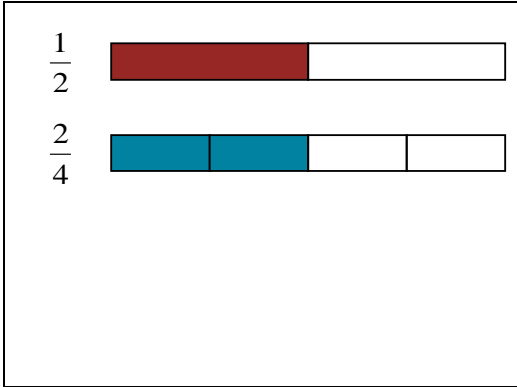
How many fourths ($\frac{1}{4}$ s) make up one whole?



Would you rather have one half or two fourths of a piece of chocolate?



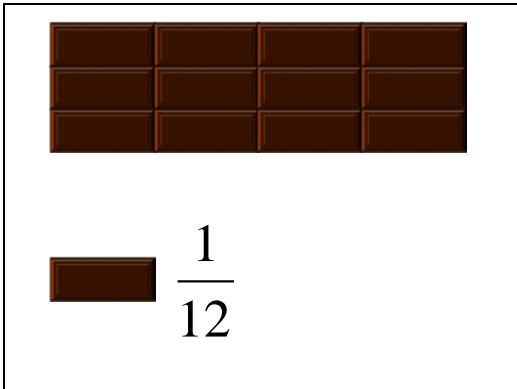


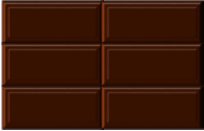



How many eighths are the same amount as one-half?

How many sixteenths?








$$\frac{6}{12} = \frac{1}{2}$$


$$\frac{3}{12} = \frac{1}{4}$$

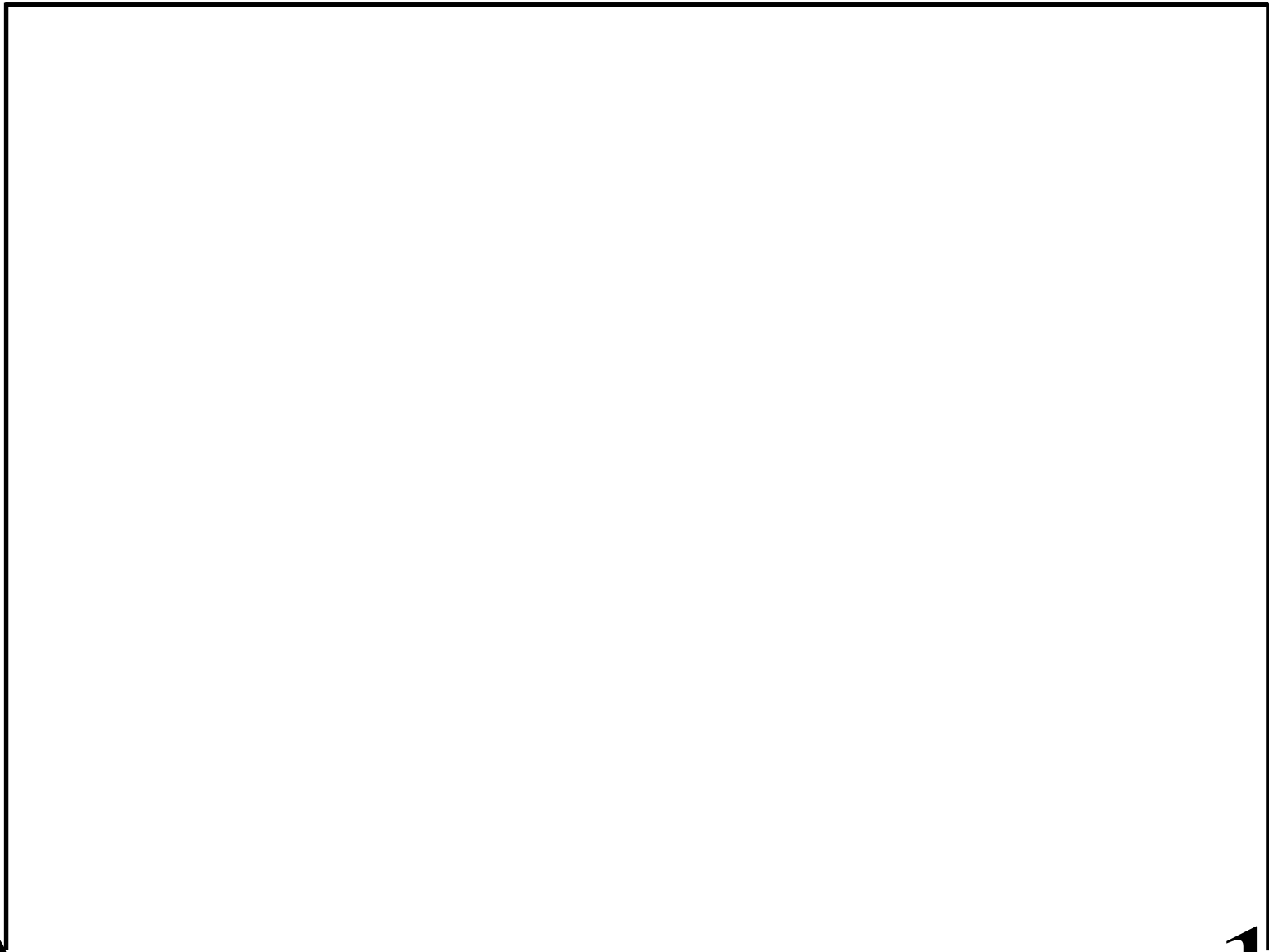


$$\frac{4}{12} = \frac{1}{3}$$





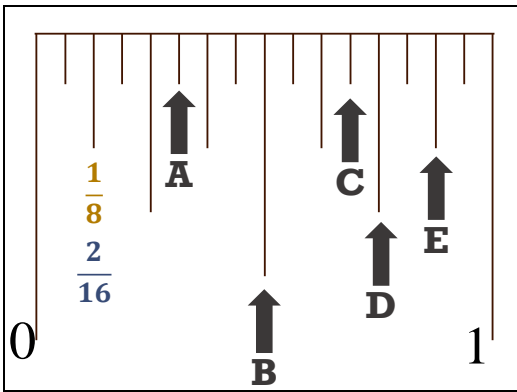
Blank Number Line



0

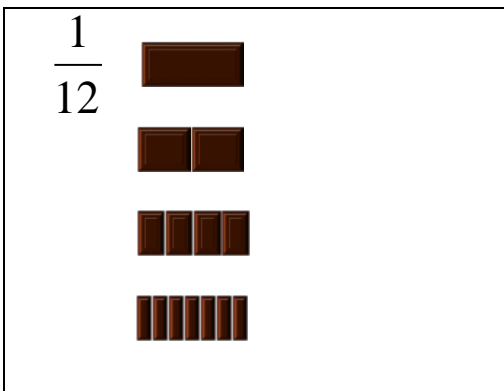
1

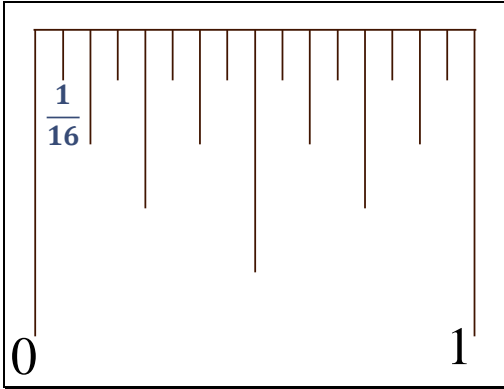


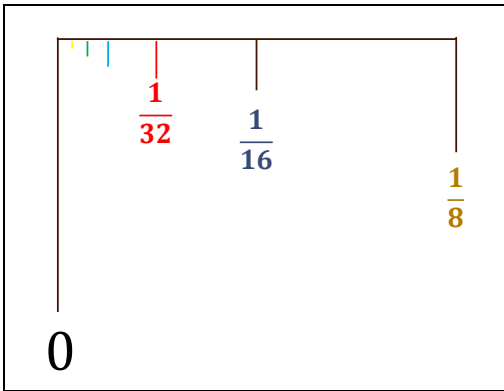


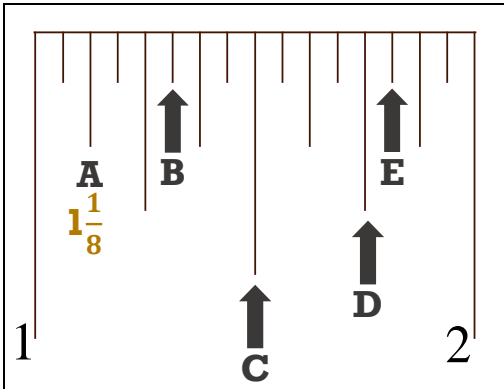
What is the smallest possible fraction of a whole Hershey's bar?



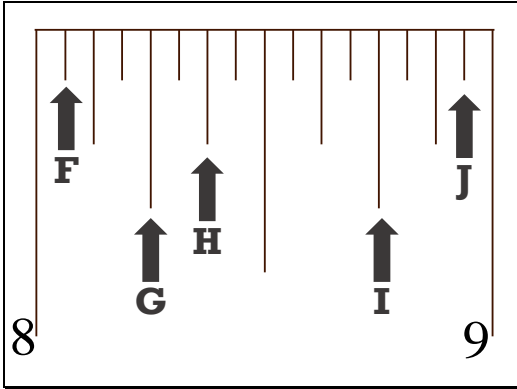












At the end of this part of the module, you should be able to determine which of two fractions is the largest



Which is larger?

$\frac{1}{2}$ **or** $\frac{1}{4}$ $\frac{1}{2}$ **or** $\frac{3}{16}$

$\frac{5}{8}$ **or** $\frac{3}{4}$ $\frac{9}{16}$ **or** $\frac{7}{8}$

Which is larger?

$$\frac{5}{16} \text{ or } \frac{3}{8} \qquad \frac{2}{8} \text{ or } \frac{1}{4}$$

$$\frac{1}{8} \text{ or } \frac{1}{2} \qquad \frac{7}{16} \text{ or } \frac{7}{8}$$

Comparing Fraction Amounts Practice 1

For each of the following pairs of fractions, circle the one that is the largest. Circle both if they are the same amount.

1. $\frac{1}{2}$ or $\frac{1}{4}$

2. $\frac{1}{2}$ or $\frac{2}{4}$

3. $\frac{1}{2}$ or $\frac{3}{4}$

4. $\frac{1}{4}$ or $\frac{1}{8}$

5. $\frac{1}{4}$ or $\frac{2}{8}$

6. $\frac{1}{4}$ or $\frac{3}{8}$

7. $\frac{1}{4}$ or $\frac{5}{8}$

8. $\frac{1}{4}$ or $\frac{8}{8}$

9. $\frac{1}{8}$ or $\frac{1}{16}$

10. $\frac{1}{8}$ or $\frac{2}{16}$



Measuring Your Success

The tape measure is one of the most basic hand tools used in the trades. Your ability to quickly and accurately measure will greatly improve your success at work.



Features of a Tape Measure

Blade: The blade is typically replaceable and usually shows measurements in feet and inches on one side and inches only on the other. Often special marks are located every 16" for wall layout.

Hook: Allows tape to be latched on to edge of material for easy one hand measuring. The hook slides to compensate for the difference between measuring when tape is hooked and when tape is pushed up against an edge.

Size: Tapes come in a range of sizes. Choose what is best for the task and the size of your hands. Sixteen and 25 foot lengths are the most common.

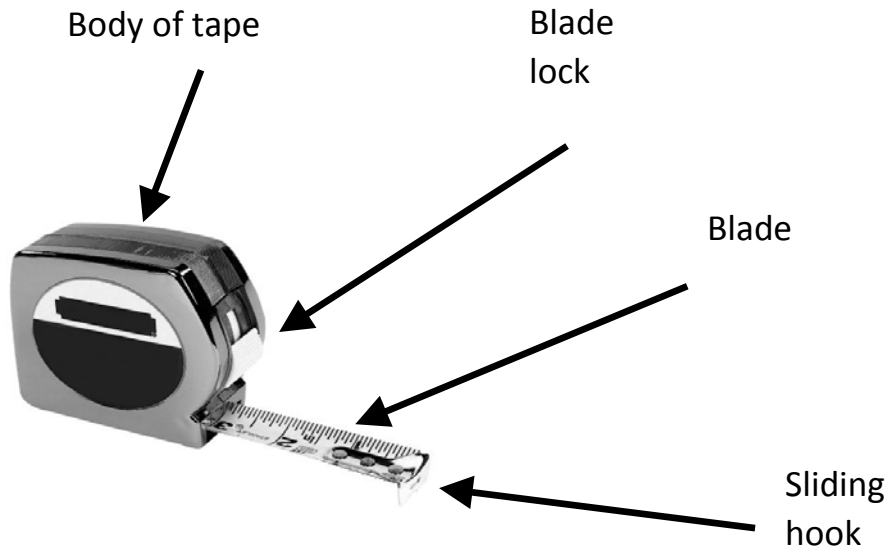
Retraction: The blade automatically retracts when pulled out. Control the return when retracting from long distances. Protect your fingers!

Lock: The tape may be locked in position which can be helpful in some situations such as layout or using it alone.

Magnetic tip: Some tapes have a magnetic tip for easier measuring against magnetic objects.



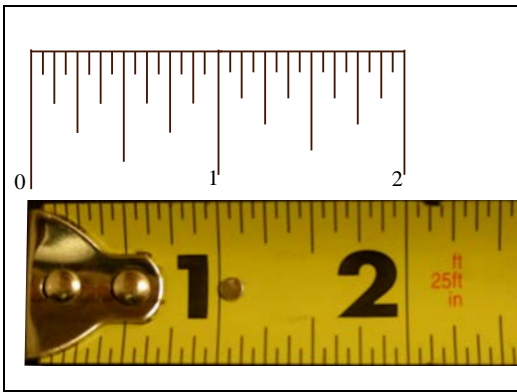
Stand out: Different tapes have different "stand out" capabilities which is the ability of the tape to hold itself rigid in a straight line. Generally, the wider the blade, the longer the stand out. A 25' tape with 3/4" blade has a 7-8' stand out.

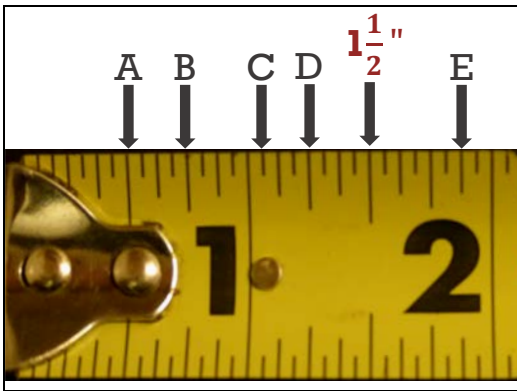


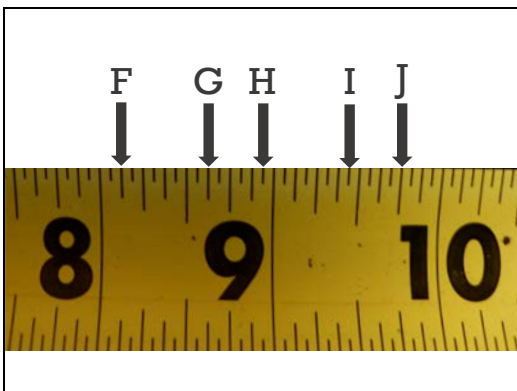
Tape Measure Skills

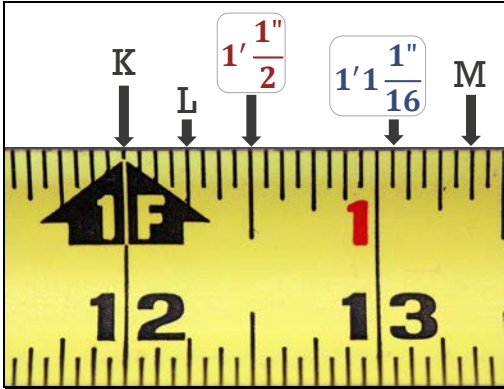
- Observe and learn the breakdown of an inch into halves, quarters, eighths and sixteenths.
- Hook the tape on an edge and pull with one hand.
- Manipulate the tape to measure a tall object vertically.
- Use the 1" or 10" mark to measure precisely--also known as "burning an inch."

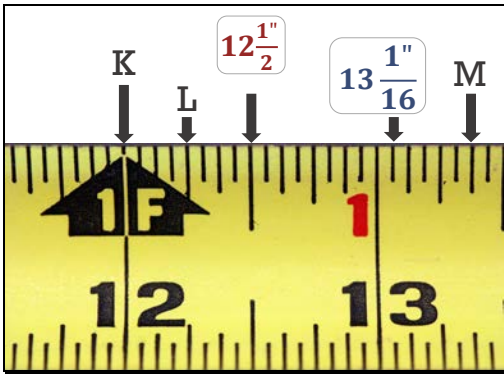


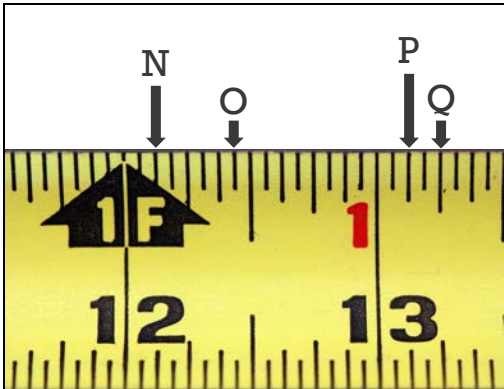




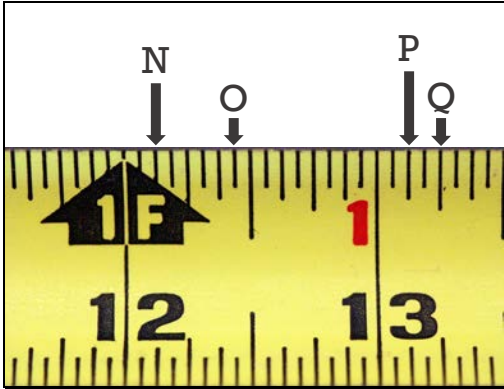


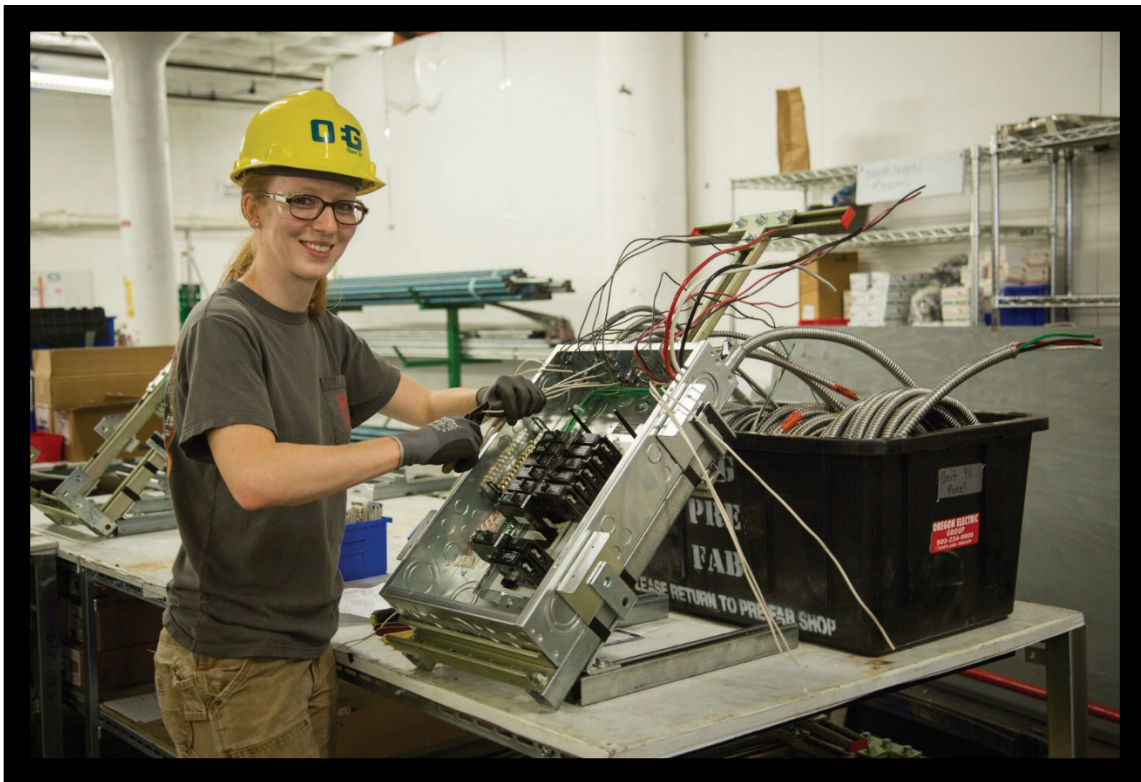






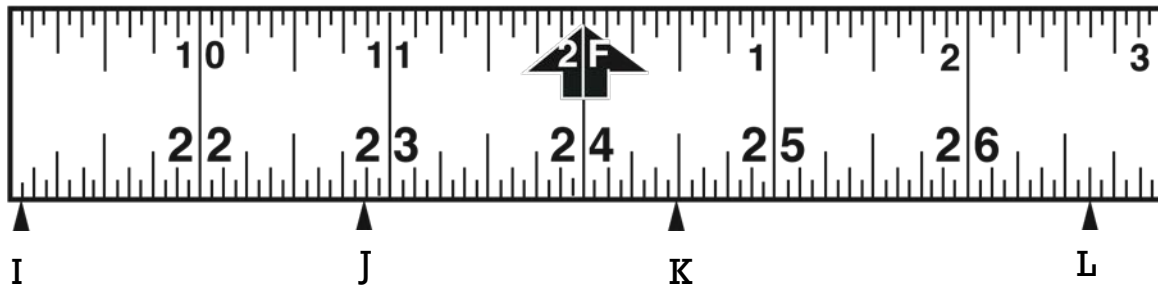
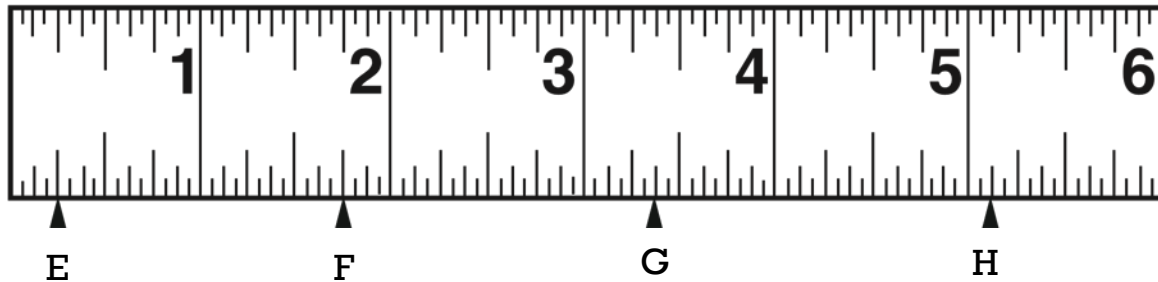
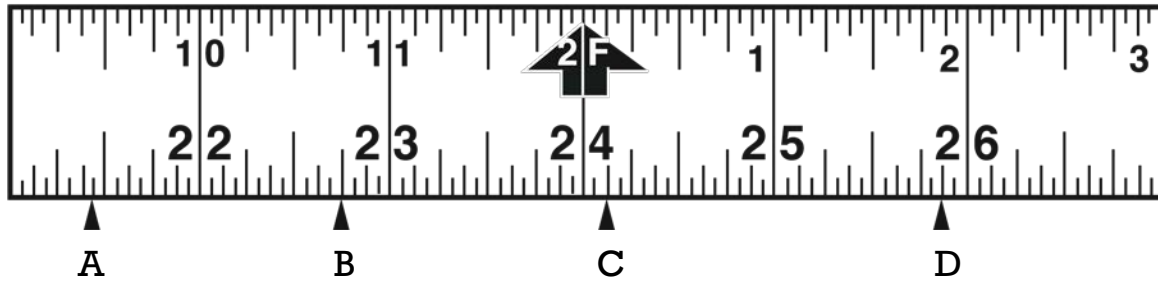


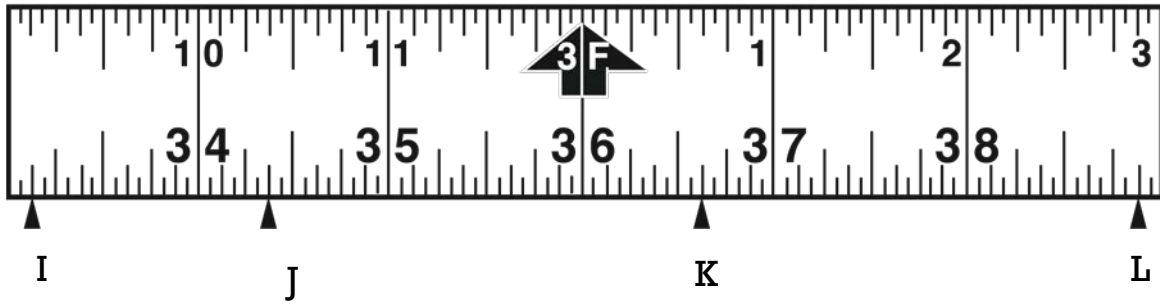
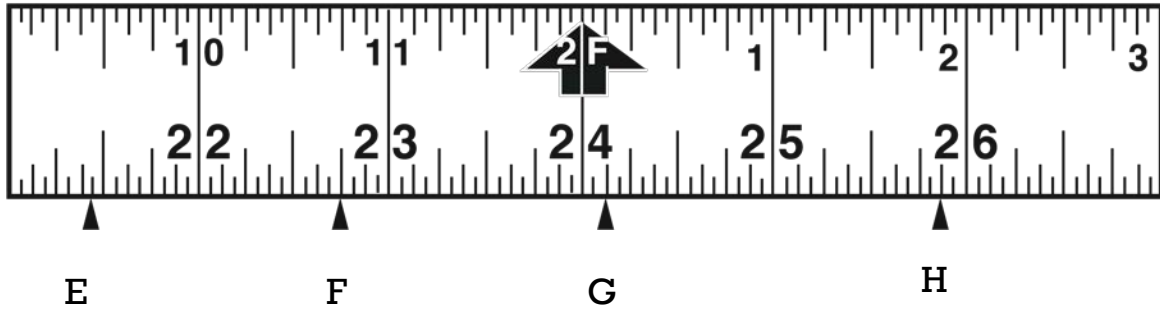




Measurement Practice 1

Identify the marks indicated on the tape. Write your answer in inches and, if applicable, feet and inches, directly under each mark.





Comparing Fraction Amounts Practice 2

For each of the following pairs of fractions, circle the one that is the largest. Circle both if they are the same amount.

11. $\frac{1}{8}$ *or* $\frac{3}{16}$

12. $\frac{1}{8}$ *or* $\frac{7}{16}$

13. $\frac{1}{8}$ *or* $\frac{11}{16}$

14. $\frac{1}{16}$ *or* $\frac{3}{16}$

15. $\frac{7}{8}$ *or* $\frac{9}{16}$

16. $\frac{1}{2}$ *or* $\frac{5}{8}$

17. $\frac{1}{2}$ *or* $\frac{7}{16}$

18. $\frac{1}{4}$ *or* $\frac{4}{16}$

Measurement Practice 2

Use your ruler to measure each of the lines. Write the length, in inches, next to the line.

1. _____

2. _____

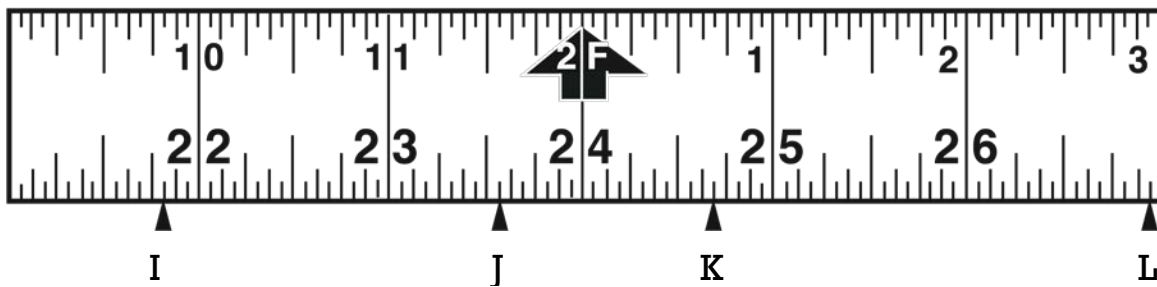
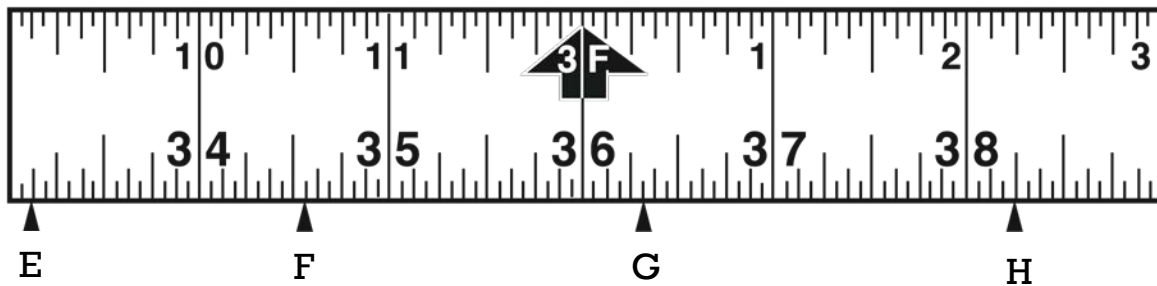
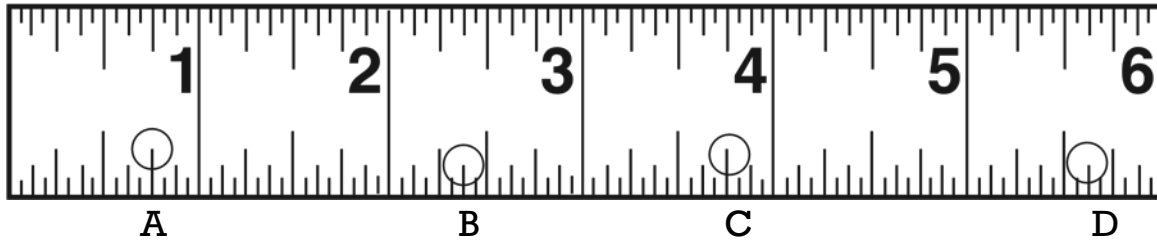
3. _____

4. _____

5. _____



Identify the marks indicated on the tape. Write your answer in inches and, if applicable, feet and inches, directly under each mark.



Comparing Fraction Amounts Practice 3

For each of the following pairs of fractions, circle the one that is the largest. Circle both if they are the same amount.

19. $\frac{7}{8}$ or $\frac{15}{16}$

20. $1\frac{5}{16}$ or $1\frac{1}{4}$

21. $1\frac{1}{8}$ or $1\frac{1}{16}$

22. $2\frac{7}{8}$ or $2\frac{3}{4}$

23. $9\frac{3}{16}$ or $9\frac{1}{4}$

24. $68\frac{3}{8}$ or $68\frac{5}{16}$

Measurement Practice 3

Use your ruler to measure each of the lines. Write the length, in inches, next to the line.

1. _____

2. _____

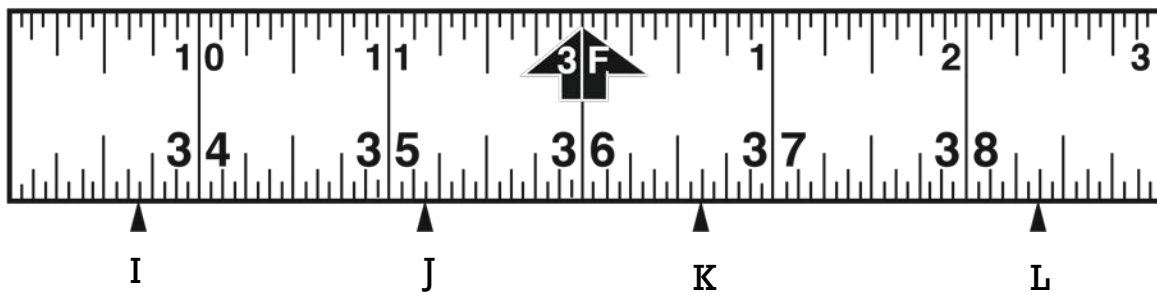
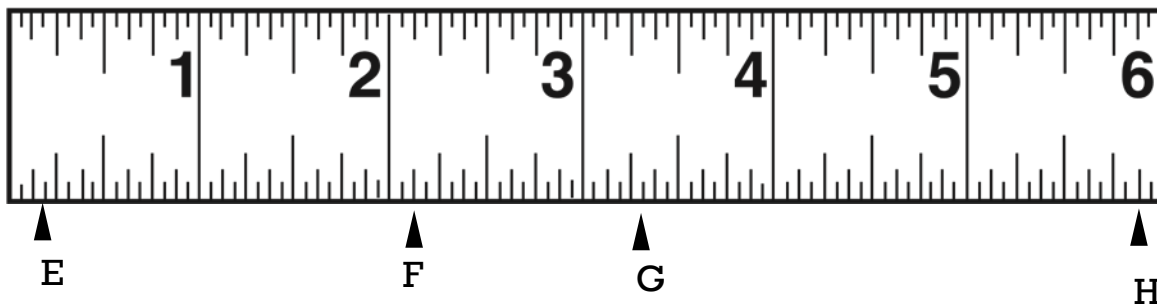
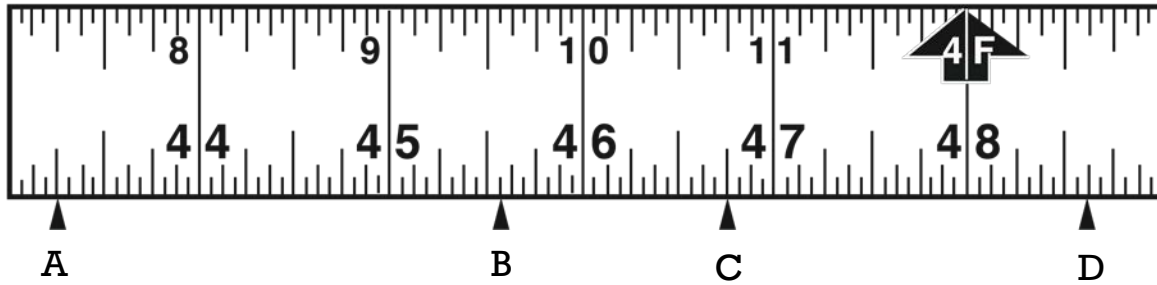
3. _____

4. _____



5. _____

Identify the marks indicated on the tape. Write your answer in inches and, if applicable, feet and inches, directly under each mark.





Comparing Fraction Amounts Practice 4

For each of the following pairs of fractions, circle the one that is the largest. Circle both if they are the same amount.

1. $14\frac{3}{8}$ or $14\frac{1}{2}$

2. $37\frac{5}{8}$ or $37\frac{3}{4}$

3. $18\frac{5}{8}$ or $18\frac{9}{16}$

4. $21\frac{1}{4}$ or $21\frac{3}{16}$

5. $3\frac{5}{16}$ or $3\frac{1}{2}$

6. $55\frac{13}{16}$ or $55\frac{7}{8}$

Measurement Practice 4

Use your ruler to measure each of the lines. Write the length, in inches, next to the line.

1. _____

2. _____

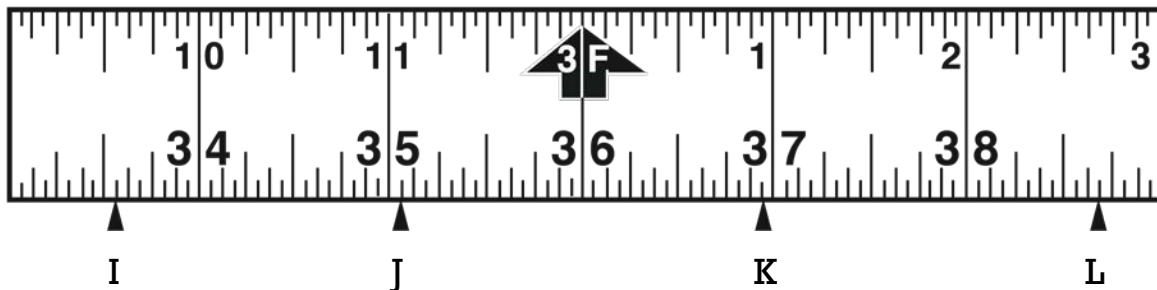
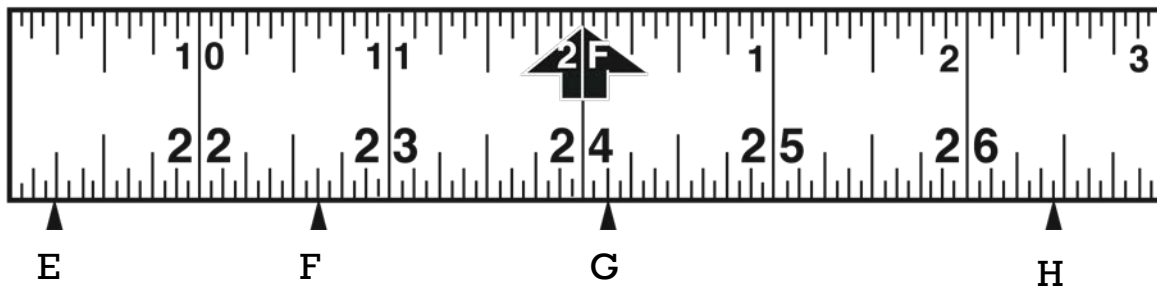
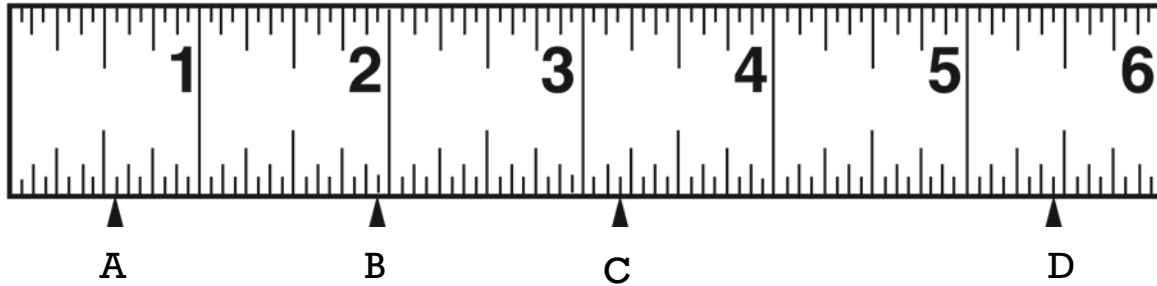
3. _____

4. _____

5. _____



Identify the marks indicated on the tape. Write your answer in inches and, if applicable, feet and inches, directly under each mark.



Measurement Practice 5

Use your ruler to measure each of the lines. Write the length, in inches, next to the line.

1. _____

2. _____

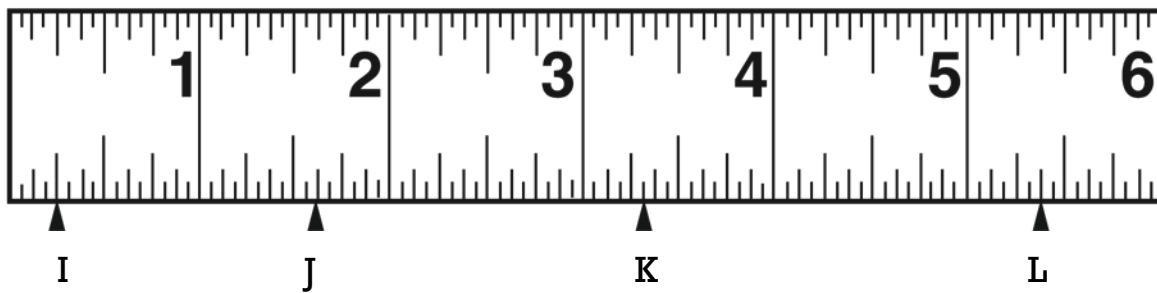
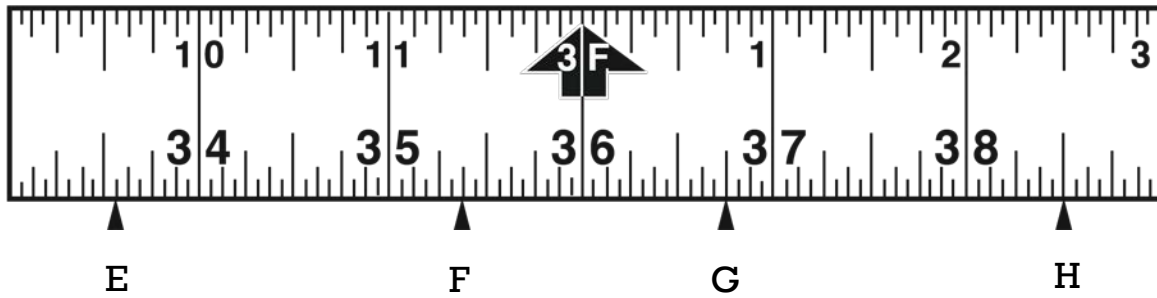
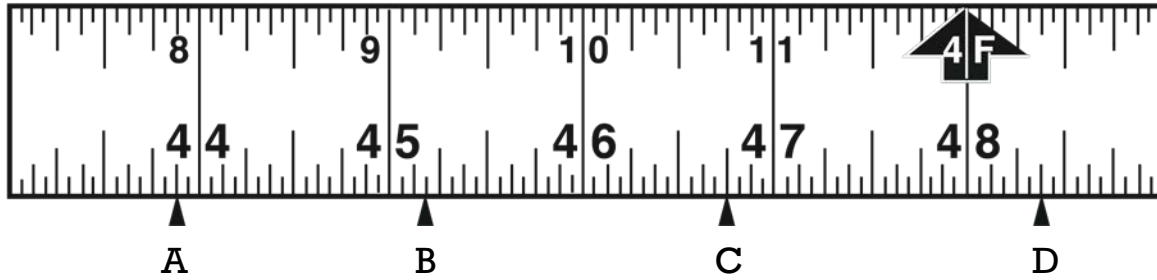
3. _____

4. _____

5. _____

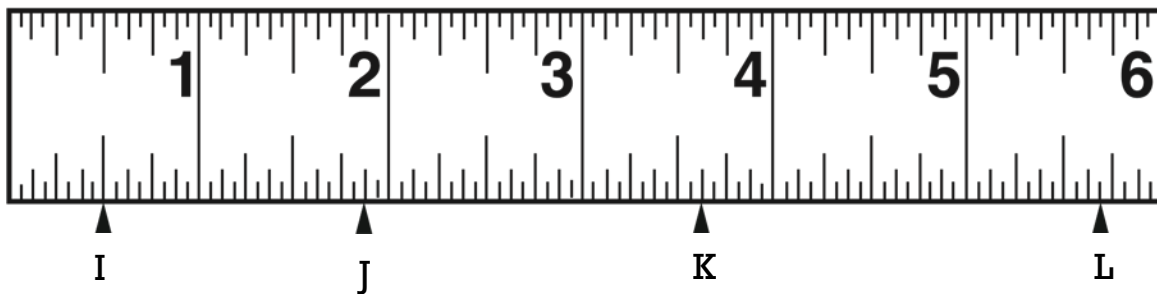
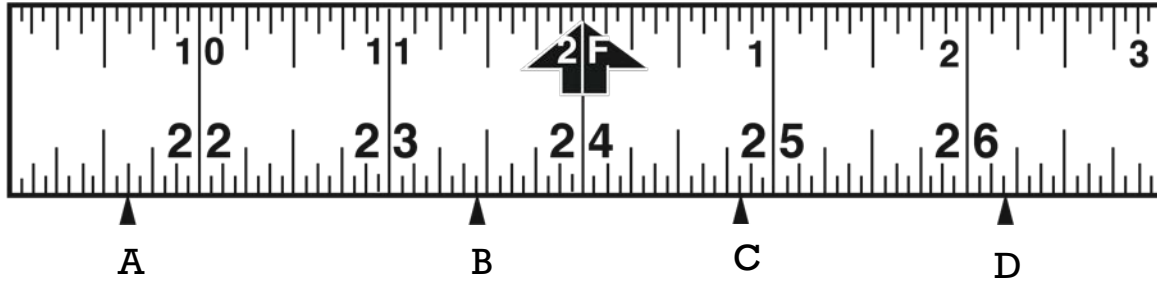


Identify the marks indicated on the tape. Write your answer in inches and, if applicable, feet and inches, directly under each mark.



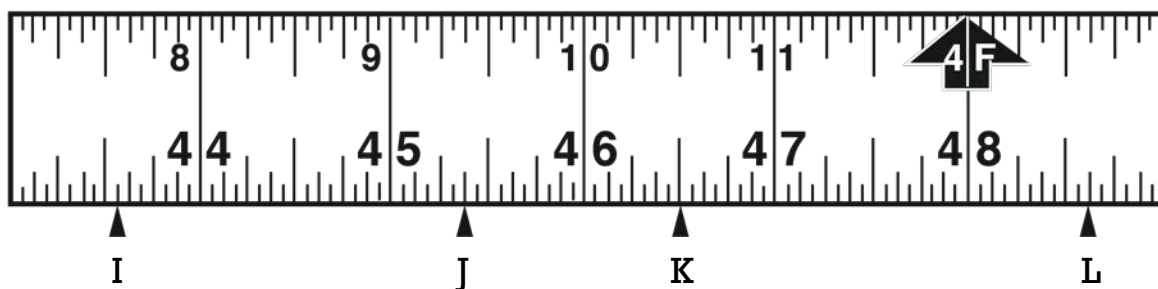
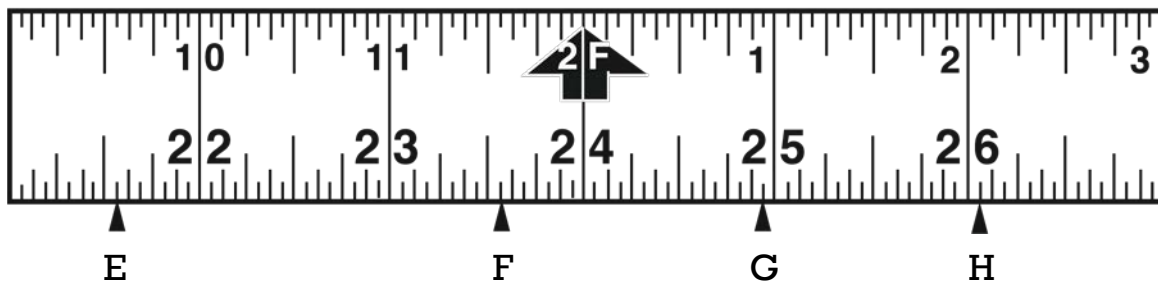
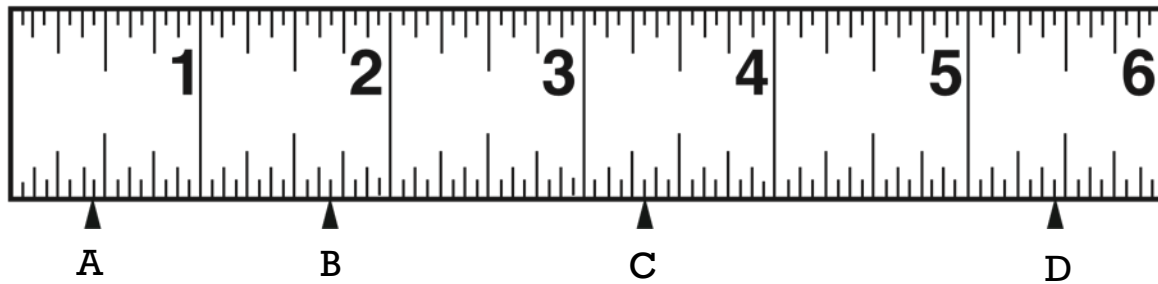
Measurement Practice 6

Identify the marks indicated on the tape. Write your answer in inches and, if applicable, feet and inches, directly under each mark.



Measurement Practice 7

Identify the marks indicated on the tape. Write your answer in inches and, if applicable, feet and inches, directly under each mark.



Measurement Practice 8

Identify the marks indicated on the tape. Write your answer in inches and, if applicable, feet and inches, directly under each mark.

