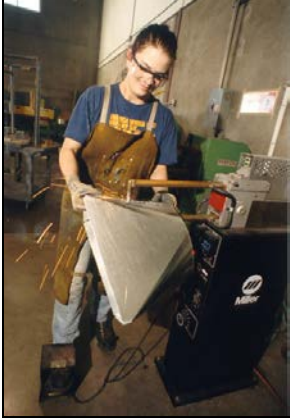


Converting Between Inches and Feet Handout



At the end of this module, you should be able to convert between inches and feet.

$$\underline{\quad} \text{''} = \underline{\quad} \text{'?}$$



**To convert feet to inches,
_____ the
number of feet by ____.**

$$6' = \underline{\hspace{2cm}}''$$

$$6' \times 12 = 72''$$

$$17' = \underline{\hspace{2cm}}''$$

$$17' \times 12 = 204''$$



$$5' 3" = \underline{\hspace{2cm}} "$$

$$5' \times 12 = 60"$$

$$60" + 3" = 63"$$

$$91' 10" = \underline{\hspace{2cm}} "$$

$$91' \times 12 = 1,092"$$

$$1,092 + 10 = 1,102"$$

$$36' 8\frac{1}{4}" = \underline{\hspace{2cm}} "$$

$$36' \times 12 = 432"$$

$$432" + 8\frac{1}{4}" = 440\frac{1}{4}"$$



1. $15' 1'' = \underline{\hspace{2cm}}'$
2. $25' 8'' = \underline{\hspace{2cm}}'$
3. $14' 6\frac{1}{8}'' = \underline{\hspace{2cm}}'$
4. $13' 10\frac{7}{16}'' = \underline{\hspace{2cm}}'$
5. $5' 9\frac{1}{2}'' = \underline{\hspace{2cm}}'$

To convert inches to feet, _____ the number of inches by ____.

$48'' = \underline{\hspace{2cm}}'$

$48'' \div 12 = 4'$



$$72'' = \underline{\hspace{2cm}}'$$

$$72'' \div 12 = 6'$$

$$25'' = \underline{\hspace{2cm}}'$$

$$42'' = \underline{\hspace{2cm}}'$$

1. $24'' = \underline{\hspace{2cm}}'$

2. $36'' = \underline{\hspace{2cm}}'$

3. $19'' = \underline{\hspace{2cm}}'$

4. $29'' = \underline{\hspace{2cm}}'$

5. $38'' = \underline{\hspace{2cm}}'$

$$165'' = \underline{\hspace{2cm}}'$$

$$165'' \div 12 = 13.75'$$

$$13' \times 12 = 156''$$

$$165'' - 156'' = 9''$$

$$13' + 9'' = 13' 9''$$

$$317'' = \underline{\hspace{2cm}}'$$

$$317'' \div 12 = 26.41666667'$$

$$26' \times 12 = 312''$$

$$317'' - 312'' = 5''$$

$$26' + 5'' = 26' 5''$$

$$230 \frac{1''}{2} = \underline{\hspace{2cm}}'$$

$$230'' \div 12 = 19.16666667'$$

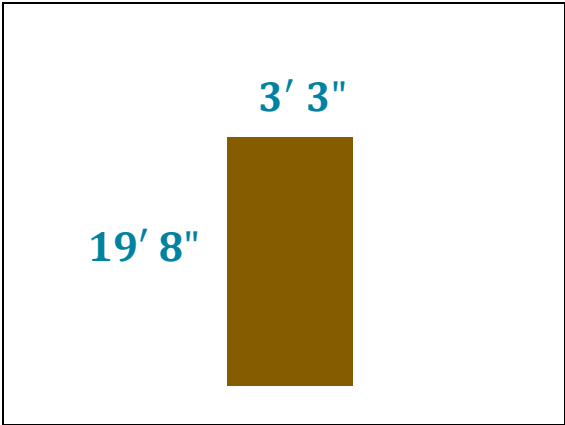
$$19' \times 12 = 228''$$

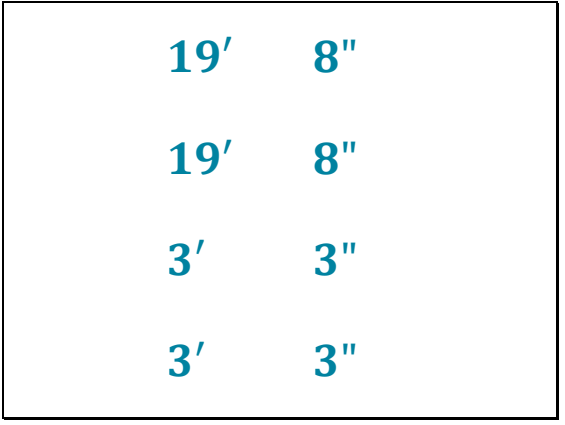
$$230'' - 228'' = 2''$$

$$19' + 2'' = 19' 2 \frac{1''}{2}$$



1. $97'' = \underline{\hspace{2cm}}'$
2. $113'' = \underline{\hspace{2cm}}'$
3. $277\frac{5''}{8} = \underline{\hspace{2cm}}'$
4. $451\frac{1''}{16} = \underline{\hspace{2cm}}'$
5. $194\frac{3''}{4} = \underline{\hspace{2cm}}'$








Convert inches to feet + inches →


44'	22"
45'	10"

$2' 7 \frac{1}{8}$		$8' 9 \frac{5}{8}$
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8'	9"	$\frac{5}{8}$
8'	9"	$\frac{5}{8}$
2'	7"	$\frac{1}{8}$
2'	7"	$\frac{1}{8}$


	20'	32"	$\frac{12''}{8}$
Change improper to proper fraction →		33"	$\frac{4''}{8}$
Convert inches to feet →	22'	9"	$\frac{4''}{8}$
Simplify →	22'	9"	$\frac{1''}{2}$


	4' 8 $\frac{3''}{4}$
	5' 11 $\frac{1''}{16}$



4'	8"	$\frac{3''}{4}$
4'	8"	$\frac{3''}{4}$
5'	11"	$\frac{1''}{16}$
5'	11"	$\frac{1''}{16}$

	18'	38"	$\frac{26''}{16}$
Change improper to proper fraction →		39"	$\frac{10''}{16}$
Convert inches to feet →	21'	3"	$\frac{10''}{16}$
Simplify →	21'	3"	$\frac{5''}{8}$

<p>Working on an HVAC job, you cut a 7' 9" piece of duct from a piece that is 10' 2".</p> <p>How long is the remaining piece?</p>	
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$\begin{array}{r} 10' \ 2'' \\ - \ 7' \ 9'' \\ \hline \end{array}$	
--	---

$\begin{array}{r} 9' \ 14'' \\ - 7' \ 9'' \\ \hline 2' \ 5'' \end{array}$	
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Working on a remodeling job, you have a piece of wood trim $11' 6\frac{1}{4}$ long. If a coworker cuts a $3' 8\frac{9}{16}$ piece from it, how long is the remaining piece?

$\begin{array}{r} 11' \quad 6'' \quad \frac{1''}{4} \\ - 3' \quad 8'' \quad \frac{9''}{16} \\ \hline \end{array}$

$$\begin{array}{r}
 11' \quad 6'' \quad \frac{4''}{16} \\
 - 3' \quad 8'' \quad \frac{9''}{16} \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 11' \quad 5'' \quad \frac{20''}{16} \\
 - 3' \quad 8'' \quad \frac{9''}{16} \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 10' \quad 17'' \quad \frac{20''}{16} \\
 - 3' \quad 8'' \quad \frac{9''}{16} \\
 \hline
 \end{array}$$



$$\begin{array}{r}
 10' \quad 17'' \quad \frac{20''}{16} \\
 - 3' \quad 8'' \quad \frac{9''}{16} \\
 \hline
 7' \quad 9'' \quad \frac{11''}{16}
 \end{array}$$

While framing a house, you need a board that is $4' 11 \frac{7}{8}$ long. If you cut the piece you need from a board $8' 2 \frac{1}{2}$ long, how long is the remaining piece?

$$\begin{array}{r}
 8' \quad 2'' \quad \frac{1''}{2} \\
 - 4' \quad 11'' \quad \frac{7''}{8} \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 8' \quad 2'' \quad \frac{4''}{8} \\
 - 4' \quad 11'' \quad \frac{7''}{8} \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 8' \quad 1'' \quad \frac{12''}{8} \\
 - 4' \quad 11'' \quad \frac{7''}{8} \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 7' \quad 13'' \quad \frac{12''}{8} \\
 - 4' \quad 11'' \quad \frac{7''}{8} \\
 \hline
 \end{array}$$



7'	13"	$\frac{12''}{8}$
– 4'	11"	$\frac{7''}{8}$
3'	2"	$\frac{5''}{8}$



Converting Between Inches and Feet Practice

The following measurements are in inches only. Convert them to measurements in feet and inches. Some answers might be in feet only. For example: $24'' = 2'$ (no inches).

1. $27'' =$

2. $19'' =$

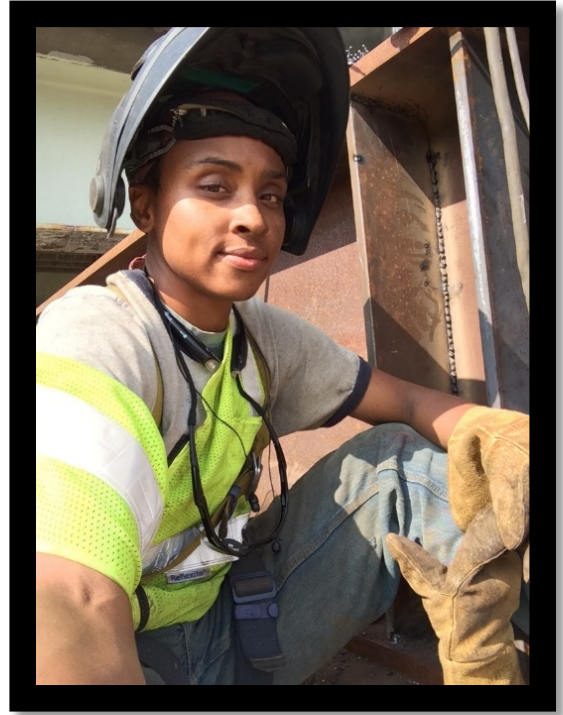
3. $77'' =$

4. $102'' =$

5. $47 \frac{1''}{2} =$

6. $140 \frac{9''}{16} =$

7. $60 \frac{5''}{8} =$



The following measurements are in feet and inches. Convert them to measurements in inches only.

8. $9' 2'' =$

9. $33' 8'' =$

10. $18' 1'' =$

11. $43' 10\frac{1}{4}'' =$

12. $8' \frac{3}{4}'' =$

13. $13' 2\frac{13}{16}'' =$

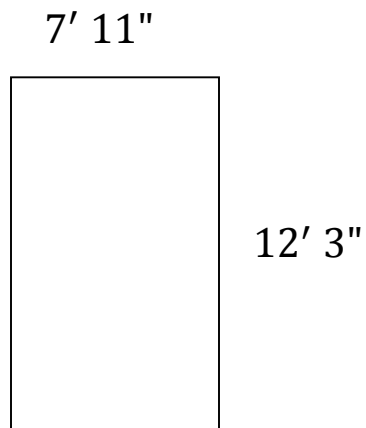
14. $7' 9\frac{1}{2}'' =$

15. $86' 3\frac{3}{8}'' =$

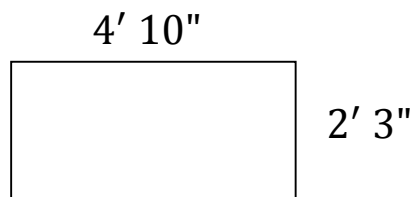


Find the perimeter for each of the following. Write your answer in feet and inches and in inches only. Simplify your answer if necessary. Note: The drawings are not to scale.

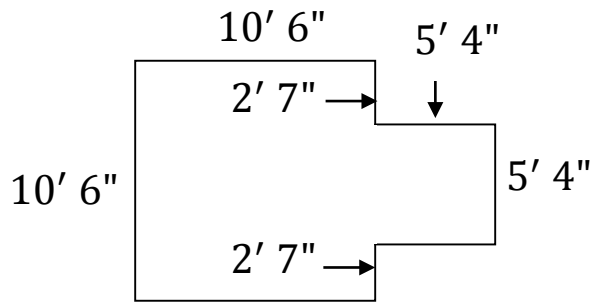
16.



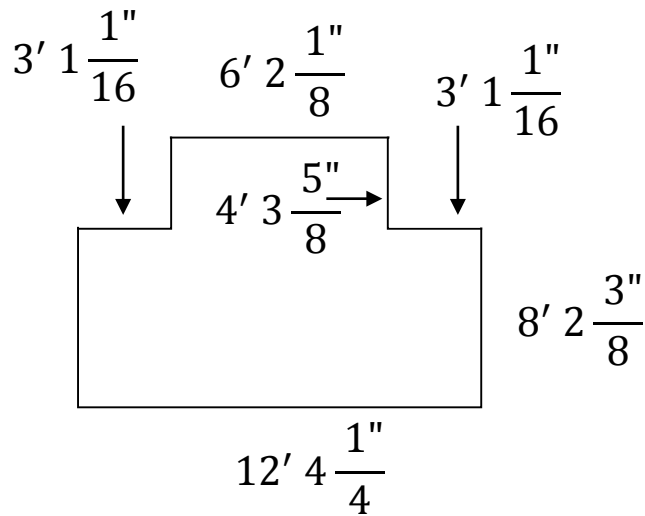
17.



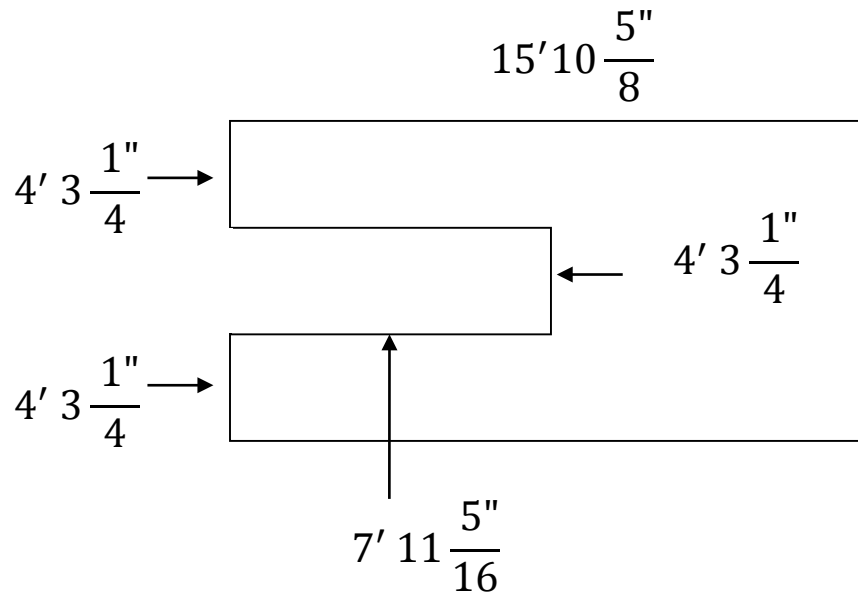
18.



19.

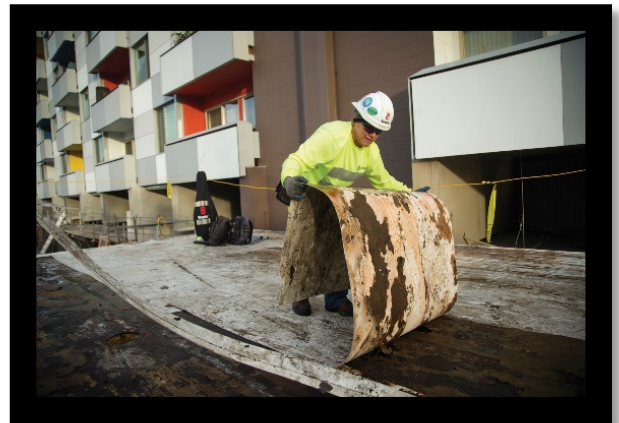


20.



Find the answer for each of the following. Write your answer in feet and inches and in inches only. Simplify your answer if necessary. Note: The drawings are not to scale.

21. You are applying roofing material to a commercial building. The lengths of material you need are: 60' 9", 72' 3", 65' 11", and 63' 10". What is the total length of material you will need?



22. You have a spool of wire that is 79' 2" long. A coworker cuts a piece of wire 7' 11" long from the spool. How much wire is left on the spool? Write your answer in feet and inches.

23. Two holes, one above the other, need to be cut in a wall to install a bathtub faucet and spout. The center of the lower hole (for the spout) is $21 \frac{3}{8}$ from the floor. The center of the upper hole (for the faucet) is $8 \frac{3}{4}$ above the lower hole. How high is the center of the upper hole from the floor?



24. Working on a plumbing job, you need a piece of pipe that is $3' 4\frac{1}{8}$ long. The piece of pipe that you have is $6' 5\frac{3}{16}$ long. How much pipe will be remaining when you cut the piece you need?

25. A kitchen being remodeled has a wall that is $8' 5''$ wide. If a dishwasher $1' 11\frac{3}{4}$ inches wide is installed on one end of the wall, how much room will there be for cabinets along that same wall?

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