



Woodshop Work Triangle Worksheet

(Shop Equipment Layout)

What this is

A **Work Triangle** is a simple way to check if your shop layout makes sense “by feet, not by theory.” Pick your **3 most-used stations** for daily work, then measure how far you actually walk between them. The goal is to reduce wasted steps **without creating unsafe congestion**.

Most shops use some version of:

- **Station A: Cutting / Breakdown** (table saw, track saw station, miter station, CNC, etc.)
- **Station B: Bench / Joinery** (main workbench, hand tools, vises, assembly bench)
- **Station C: Assembly / Sanding / Finish-Prep** (assembly table, sanding station, clamp wall)

You can swap these to match your workflow (ex: Milling instead of Cutting, or Edge bander instead of Assembly).

Instructions

Step 1) Define your “Triangle Stations”

Pick the **three stations you touch most** in a normal job. Write them in the worksheet below.

Tip: If you build cabinets, your triangle might be **Breakdown > Edgebanding > Assembly**.

If you build furniture, it might be **Table Saw > Bench > Band Saw/Assembly**.

Step 2) Record your “Reality Measurements”

You’re not measuring straight lines on paper you’re measuring **the path you actually walk**:

- Measure from the **operator position** (where you stand) at Station A to Station B
- Then B to C
- Then C back to A

Write distances in **feet + inches** (or cm/m).

Step 3) Check clearances and flow (safety first)



Before you celebrate shorter distances, confirm:

- You can move around the bench comfortably (don't "box yourself in")
- You have infeed/outfeed space for your longest material
- Your triangle path isn't constantly blocked by carts, clamps, cords, or dust hose

Step 4) Do a quick "walk test"

Pick one common task (example: cut parts > mark/join > dry fit/assemble).

Walk it **3 times** and note:

- Where you hesitate
- Where you detour
- Where material handling gets awkward

Step 5) Make one improvement at a time

Don't rearrange the whole shop at once. Start with:

- Moving one station 12–24 inches
- Putting one tool on a mobile base
- Relocating clamp storage, hand tools, or measuring tools closer to the bench



WORKSHEET

A) Shop Snapshot

Shop Name: _____

Date: _____

Shop Size (L x W): _____

Ceiling Height: _____

Doors / fixed obstacles (list):

Primary work type (circle): Cabinets / Furniture / Trim / Mixed / Other: _____

Longest typical material: _____ ft / _____ m

Sheet goods? Yes / No

B) Choose Your 3 Triangle Stations

Station A (Name): _____

Main equipment at A: _____

Operator position (where you stand): Front / Left / Right / Other: _____

Station B (Name): _____

Main equipment at B: _____

Operator position: Front / Left / Right / Other: _____

Station C (Name): _____

Main equipment at C: _____

Operator position: Front / Left / Right / Other: _____

C) Distance Measurements (Walk Path)

Measure how far you actually walk (around obstacles).

A → B: _____ ft _____ in (or _____ m / cm)

B → C: _____ ft _____ in (or _____ m / cm)

C → A: _____ ft _____ in (or _____ m / cm)

Total steps/travel feel (circle): Smooth / Okay / Too much walking / Congested

Where do you detour or get blocked?



D) Station Requirements (Footprint + Clearance)

For each station, record the space it needs to be safe and usable.

Station A (Cutting/Breakdown)

Machine/Station footprint (L x W): _____

Infeed needed: _____

Outfeed needed: _____

Side clearance needed: _____

Dust collection hookup? Yes / No **Power needs:** 110 / 220 / Other

Station B (Bench/Joinery)

Bench footprint (L x W): _____

Clear space around bench: _____

Hand tools stored within reach? Yes / No

Clamps nearby? Yes / No

Station C (Assembly/Sanding/Finish-Prep)

Table/area footprint (L x W): _____

Clear space for moving panels/parts: _____

Clamp wall / cart nearby? Yes / No

Dust control / ventilation notes: _____

E) Equipment Inventory (Add as needed)

Copy/paste this block for each machine:

Machine name: _____

Location (near A/B/C or “outside triangle”): _____

Footprint (L x W): _____

Infeed/outfeed lane needed: _____

Working-side clearance: _____

Dust port size: _____

Power: _____

Notes (mobile base? shared space?):



F) Triangle Flow Check (Quick Scorecard)

Answer Yes/No:

1. My triangle stations are close enough that I'm not "walking a marathon." **Yes / No**
2. My triangle path is usually clear (not blocked by storage/carts). **Yes / No**
3. I can handle my longest material safely at Station A. **Yes / No**
4. The bench is easy to circle and work from all sides. **Yes / No**
5. I don't cross the shop repeatedly to grab clamps, squares, pencils, tape. **Yes / No**

Biggest friction point right now:

One change I can test this week:

G) Action Plan (Small, practical changes)

Pick **one** from each category:

Move: (station/tool) _____ by _____ inches/feet

Add: mobile base / cart / shelf / clamp rack / extension table (circle one)

Remove/relocate clutter: _____

Mark zones: tape on floor for infeed/outfeed lanes? **Yes / No**

Retest date: _____