

GUIDE FOR WEST VIRGINIA STATE FFA LAWN TRACTOR OPERATORS' CONTEST

OBJECTIVES

Encourage youth to:

1. Develop leadership character and good citizen ship
2. Develop skills and attitudes necessary to safely operate a lawn tractor (less than 20 hp.)
3. Practice basic and routine lawn tractor care and maintenance.
4. Demonstrate their knowledge and skill in the areas of lawn care, business management, and lawn and tractor operation.

ELIGIBILITY

Any student which is enrolled in agricultural education and is an FFA member is eligible to participate. This includes 9-12 grade students. Three students from each region may participate in the state event. State winners who have competed in the tractor operations' contest in previous years are not eligible to compete.

EVENTS

The state FFA contest winner will be the individual with the lowest number of total penalty points from all the events. The state FFA tractor contest will consist of the following events:

Event Number 1- Written Examination

The written examination is composed of twenty-five multiple choice questions. The questions are taken from FFA lawn tractor project literature. Questions primarily pertain to the Learn to Earn project and the operation care, and maintenance of lawn tractors and their safe use. Business management, lawn care and turf management questions are also included. The examination has a time limit of 20 minutes. There are 4 penalty points for each missed question.

Event Number 2- Item Identification

The item identification requires the contestant to identify 25 numbered items. Items will be tagged for identification. This event has a time limit of 15 minutes. Items used for identification will come from the Lawn Tractor Parts Identification sheet in this packet. There are 4 penalty points for each missed item. The scoring sheet is shown on page

Event Number 3- Safety

Safety practices and behavior of the contest will be judged throughout the contest. The safety scoring sheet is shown on page 14

Event Number 4- Lawn Tractor Driving

The Lawn Tractor Driving event allows the contestant to maneuver a lawn tractor through an obstacle course around a curb, forward and reverse through an alley, forward to a fixed object and back into a shed. The event will be timed maximum of 8 minutes allowed. The rules and procedures are listed on page 15. The course layout and score sheet is shown on pg. 16.

TRACTOR SELECTION

New lawn tractors will be used. Contestant's choice of tractor will be used for the Lawn Tractor Safety and the Lawn Tractor Driving Event.

SCORING

The points-off system will be used with penalty points given for errors. The winner will have the lowest score. Stop watches will be used in the Lawn Tractor driving event. Designated judges will preside over the event and their decisions will be final.

PRACTICE PERIOD

A practice period will be designated one half hour before the contest starts.

* Slight changes involving the event may be made prior to the contest. Changes must be uniform among all contestants and be understood and agreed upon by contestants and advisors.

FFA CONTACT

Jason Hughes, Agricultural Education (304) 558-2347

NAME _____

CONTESTANT NUMBER _____

COUNTY _____

FFA CHAPTER _____

PENALTY POINTS: INCORRECT _____ X _____

LAWN TRACTOR PARTS IDENTIFICATION

Instructions: Write the tag number on the line or the most correct name for the part.**INSECTS**

- Cut Worm
 Side Worm
 White Grub

PARTS and EQUIPMENT

- Aerifork
 Air filter element, dry
 Battery cable
 Battery, 12 volt
 Bearing, Ball
 Bearing Needle
 Bearing, sleeve
 Bearing, tapered roller
 Belt, flat
 Belt, "V"
 Blade, reel mower
 Blade, rotary mower
 Blade, edge/trimmer
 Chains, roller
 Clippers, grass
 Clipper, hedge
 Clutch pedal
 Clutch plate
 Fuse
 Gear
 Heat exchanger
 Hydraulic hose
 Hydraulic lift cylinder
 Lawn sprinkler head
 Magneto, breaker type
 Magneto, solid state
 Mower height adjuster
 Mower wheel
 Muffler
 Nozzle hose
 Pin, drawbar
 Pin, implement mounting
 Pulley, flat belt

- Pulley idler (tightener)
 Pulley, "V" belt
 Oil drain plug
 Rotary blade Adapter
 Spreader, broadcast
 Sprocket
 Starting Safety interlock
 Tie rod end
 Tiller drag bar
 Tire tube
 Tire, Tractor, front
 Tire, Tractor, rear
 Trans-axle
 transport wheel assembly
 Valve core
 Valve stem
 Wheel lug bolt
 Wheel lug nut

PLANTS and SEEDS

- Grass seed
 Legume seed
 Kentucky bluegrass

OTHER

- Accounting ledger
 Business card
 Granular fertilizer
 Ground limestone

TOOLS

- Gage, spark plug gap
 Gage, thickness or feeler
 Spark tester
 Valve Spring compressor
 Wrench, socket, 1/2" drive
 Wrench socket, 3/8" drive
 Wrench, spark plug

- Wrench, ratchet handle 1/2"
 Wrench ratchet handle 3/8"
 Wrench, torque 1/2"
 Wrench Torque 3/8"

WEEDS

- Annual Bluegrass
 Carpetweed
 Common chickweed
 Common purslane
 Crabgrass
 Dandelion
 Goosegrass
 Ground ivy or creep Charlie
 Knot weed
 Plantain
 Prostate spuge
 Quackgrass
 Shepherdspurse
 White clover
 Yellow nutsedge

ADDITIONAL

- _____

NAME: _____

CONTESTANT NUMBER: _____

COUNTY: _____

FFA CHAPTER: _____

LAWN TRACTOR SAFETY**Procedure**

Each contestant will be scored on safety throughout the contest. Judges must see contestant physically move levers to check for correct position.

ScoringPre-starting check

	<u>Number of times</u>	<u>Penalty</u>	<u>Penalty Points</u>
1. Failure to check fuel level.	_____	x25	_____
2. Failure to check oil level.	_____	x25	_____
3. Failure to observe tire inflation.	_____	x25	_____
4. Failure to observe loose or missing parts.	_____	x25	_____

Obstacle Removal

1. Distance traveled before stopping (inches)	_____	x5	_____
2. Failure to set brakes.	_____	x50	_____
3. Failure to disengage brakes	_____	x50	_____

Starting Safety

1. Failure to check neutral position.	_____	x25	_____
2. Failure to disengage clutch while starting engine	_____	x50	_____

Driving Safety

1. Failure to engage clutch gently.	_____	x25	_____
2. Failure to ride in seat.	_____	x100	_____
3. Skidding or spinning tractor wheels (scuffing of inside wheel while turning does not count as a skid. Skid of the front tractor wheel does not count until the skid equals or is greater than the width of the tire).	_____	x50	_____

Mounting and Dismounting Safely

1. Failure to set both brakes before dismounting (transmission set in park or locked position counts brakes locked).	_____	x50	_____
2. Failure to bring tractor to complete stop before dismounting.	_____	x100	_____

Other Safety Concerns

1. Smoking	_____	x100	_____
2. Extra Riders	_____	x100	_____
3. Other _____	_____	x100	_____

TOTAL PENALTY POINTS

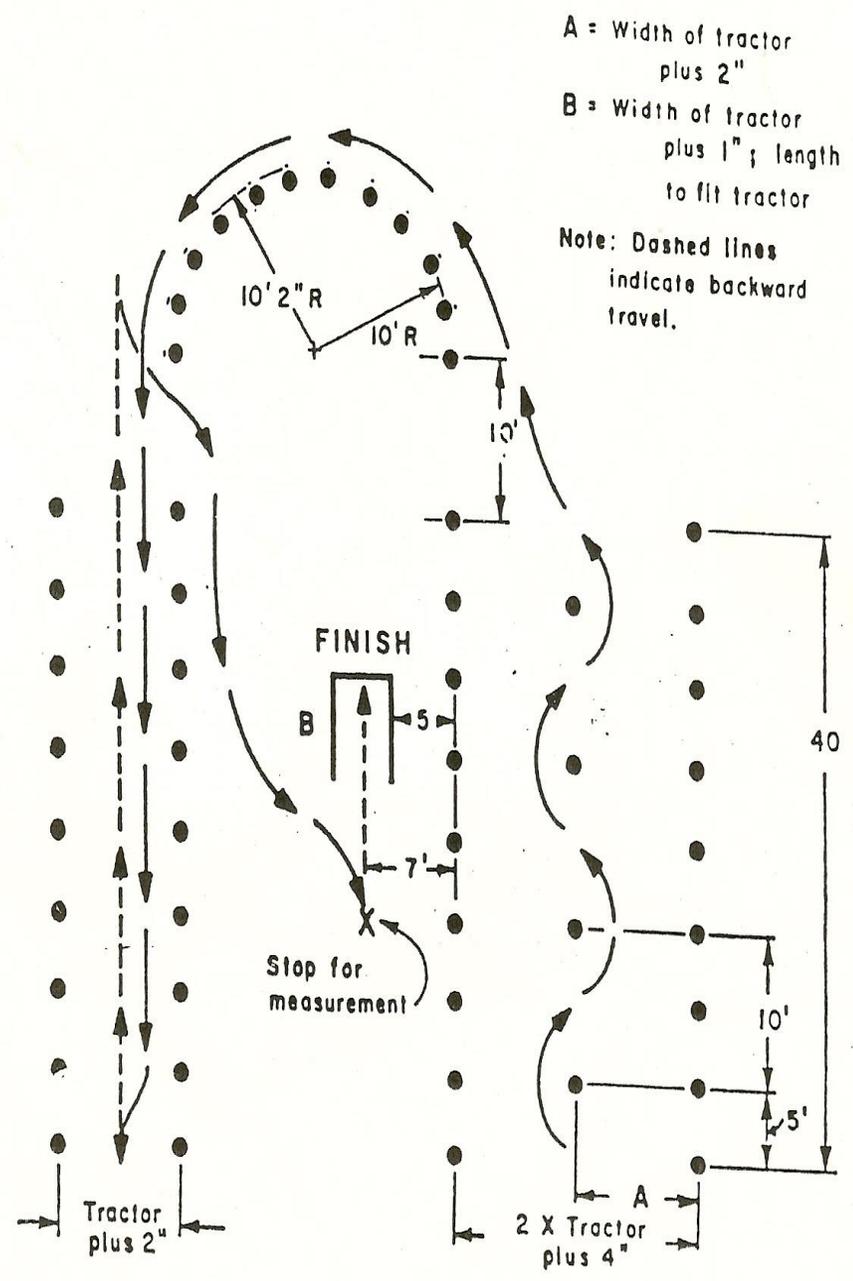
Lawn Tractor Driving Event

Procedure

- Three scores should be available-one for timing and two for measuring and observing operation.
1. The contestant should conduct the pre-operation checks necessary for the operation (see Lawn Safety Score Sheet) and report these items to the safety judge.
 2. The contestant should start and warm up tractor. One signal from the event official contestants are to drive tractor to starting line (rear wheels on line.)
 3. Contestant signals official that they are ready to begin (engine should be running brake set and in neutral or park.) Official gives signal for contestant to begin the event. Time begins upon signal from the event official.
- Contestant should be prepared for an obstacle to appear at any point on the contest course. If an obstacle appears, the contestant is to stop, prepare lawn tractor for dismount, and remove obstacle before proceeding.
 - A. Drive the lawn tractor through the obstacle course.
 - B. Drive along circular curb keeping the mower deck within two inches of the markers.
 - C. Drive forward through the alley.
 - D. Drive in reverse through the alley.
 - E. Drive forward through gate up to the stop stake attempting to stop as close to the stake as possible without hitting the stake.
 - F. Drive in reverse into the shed placing the lawn tractor in the center.
 - G. Shut off engine (time stops when engine fan stops.)

LAWN TRACTOR DRIVING EVENT

Diagram



A = Width of tractor plus 2"
B = Width of tractor plus 1"; length to fit tractor

Note: Dashed lines indicate backward travel.

COMPACT TRACTOR
OPERATION COURSE

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