

**DELAWARE FFA/4-H SAFE TRACTOR / EQUIPMENT OPERATING
CONTEST / CAREER DEVELOPMENT EVENT (CDE)**

Event Coordinator

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EVENT INFORMATION:

You must have the following forms filled out completely and submitted at time of registration:

FFA:

- Big E waiver form
- Big E registration form
 - o Both of these forms can be found at the following website:
http://www.thebige.com/agriculture/ag_ffa_cdes.html

Delaware CDE forms

- o Both of these can be found on the Delaware FFA Website

Note you do not need national forms; this is only a **REGIONAL** event only.

4-H participants will need to submit the online parental permission form.

If the youth has not competed in this event before or participated in a training before, they are required to attend training. A training session will be scheduled prior to the State Fair. Those who have attended or participated in the past years are welcome to attend for a refresher practice.

EVENT RULES AND REGULATIONS:

1. All contestants must be 14 years of age to compete.
FFA contestants: Only the **TWO** FFA Chapter Tractor/Equipment Operating Representative that is certified by the respective LOCAL ADVISOR and has attended the **mandatory** practice event is eligible to compete in this contest. **FFA, No Waiver + No "Big E" Certs= No drive.**
- 4-H contestants: must have attended a practice event at the state, county or club level.
2. Appropriate Dress: T-shirt with sleeves (If FFA it must say FFA on the shirt), long pants, belt, and work shoes are **required**. It is recommended that long hair be pulled up and jewelry is taken off. Gloves are optional. Shirt should be tucked in for safety.
3. **All Cell Phones must be turned off and put away!**
4. **No tobacco product use is allowed by contestants.**
5. Each contestant must complete all events.
6. Excessive tractor brake steering will disqualify the contestant.
7. Contestants will be disqualified if they are observed not following safety standards, which may endanger themselves or the public.
8. Contestants will be disqualified if they do not wear their seatbelt while operating the equipment.
9. Contestants will be disqualified if they do not adhere to the designated path through the course.

EVENT FORMAT:

1. The contest will consist of six (6) parts (four (4) parts for 4-H), each of which will be scored separately--A written test, tools/tractor parts ID, a two-wheeled manure spreader event, a four-wheeled trailer event, tractor loader event (FFA only) and skid-loader event (FFA only).
2. Tractors and equipment will be provided for each event. All contestants will use the same tractor and piece of equipment provided at that event.
3. All persons other than the judges, the scorers and the contestants will be barred from the contest area during the contest.
4. The Chair(s) in charge of this contest will select judges and scorers.
5. In case any situation occurs that is not covered in the rules, the decision of the judges will be final.
6. The contestant with the **lowest** deductions will be the winner. (In other words, low score wins)
7. Tie breakers will be as follows: 1) test score 2) parts I.D. score 3) four-wheeled event score 4) two-wheeled event score 5) loader tractor (FFA only) 6) skid loader event score (FFA only).

PART I - Written Test: 30minutes allotted—administered in the bleachers

1. The written test will include up to fifty (50) questions centered on the skill, safe operation and operator maintenance of tractor.
2. Refer to SAFE OPERATION OF AGRICULTURAL EQUIPMENT (Student Manual from HOBAR PUBLICATIONS (800) 846-7027) for possible questions.
3. The test will include true-false, completion and/or multiple-choice questions.

Example: 1. T_____ F_____

Example: 1. Check the _____ in air cleaners once daily.

Example: 1. All grease fittings should be

- A. Well cited
- B. Painted periodically
- C. greased on schedule

4. Each question answered incorrectly or left unanswered will be valued at ten (10) points.

(500 points possibly added to overall score)

PART II - Tools/Tractor Parts ID: 10 minutes allotted---administered outside the “ring”

1. Each contestant will identify mechanic tools and tractor parts from a gas or diesel tractor. Up to 30 tools and parts will be identified. They may include a torque wrench, open-end wrench, flywheel, piston, starter, etc. Contestants will choose from a bank of answers.
2. Each answer missed or left unanswered will be valued at ten (10) points.
3. Refer to www.snap-on.com, www.valu-bilt.com, or www.craftsman.com.

(300 points possibly added to overall score)

Part III - VI - Operating Skills Events:

1. FFA contestants will complete four equipment operating events (a two-wheeled manure spreader event, a four-wheeled wagon event, a tractor loader event, and a skid steer event). 4-H contestants will complete two equipment operating events (a two-wheeled manure spreader event and a four-wheeled wagon event). 30-60 hp compact tractors of various manufacturers are typically used in tractor events. These events will test the skill and ability of the contestant to operate the assigned equipment safely.
2. Judges will provide a brief overview of the event, the course, and the rules to the contestants
3. Each contestant will start off with a visual inspection of the equipment and attachments. Contestants should verbalize to the judges what is being checked or observed during the inspection.
4. The contestant will follow the course outlined by the judge (see attached illustrations.)
5. Each event is given a total of ten (10) minutes to be completed. Time starts on a signal from the judge and ends when the contestant returns to the original point or indicates he/she is finished.
6. The contestant will be allowed ten (10) minutes for each event. The contestant will be notified at eight minutes that two minutes are left. If the contestant does not finish the

event in ten (10) minutes, a **500-point** deduction will be added to their score. At fifteen (15) minutes, the contestant will be stopped and disqualified for the event.

7. Excessive tractor brake steering will disqualify the contestant.

8. Contestants sitting idle on equipment and not moving for one continuous minute during the event will have a **500-point** penalty added to their score.

9. The contestant may be disqualified for excessive tractor brake steering.

10. Contestants may be disqualified if they are observed not following safety standards, which may endanger themselves or others.

NOTE: CONTESTANTS WILL BE STOPPED AND DISQUALIFIED BY THE JUDGE WAVING A RED FLAG IF IT IS FELT THAT THE CONTESTANT IS NOT IN FULL CONTROL OF THE SKID-LOADER OR TRACTOR AND SAFETY OF THE OPERATOR AND OTHERS ARE JEOPARDIZED!

**DELAWARE FFA/4-H SAFE TRACTOR / EQUIPMENT OPERATING
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Score Sheet Two Wheeled Manure Spreader Event

Contestant Name/Number: _____ Chapter/Club: _____

BEFORE STARTING TRACTOR (verbal response)

Deductions

Check fuel and oil gauge	_____ X	10
Check brakes - depress brake pedal with engine running, tractor in gear	_____ X	10
Check tires - by sight only	_____ X	10
Check hazards - dirt, grease, tools, improper attachments, etc	_____ X	10
Check safety belts	_____ X	10
Check ROPS	_____ X	25

STARTING

Transmission not in Neutral/ Park	_____ X	25
Brakes not set	_____ X	25
Clutch not disengaged	_____ X	15

OBSTACLE COURSE

For each time tractor or manure spreader touches obstacles or lines	_____ X	50
For each time tractor or manure spreader knocks down obstacles or crosses lines	_____ X	100
For each unnecessary change of direction (forward or backward)	_____ X	50

BACKING MANURE SPREADER INTO THE ALLEY

Number of inches over three (3) inches from the back of the stall	_____ X	10
Number of inches off center in the front	_____ X	10
Number of inches off center in the rear	_____ X	10
For each time tractor or manure spreader touches obstacles or lines	_____ X	50
For each time tractor or manure spreader knocks down obstacles or crosses lines	_____ X	100
For each unnecessary change of direction (forward or backward)	_____ X	50

JUDGES OBSERVE AT ALL TIMES DURING ABOVE OPERATIONS

Failure to use seat belt		DISQUALIFY
Failure to adhere to the designated path through the course		DISQUALIFY
Improper mount/dismount	_____ X	50
Failure to set brakes when getting off/or put in Park	_____ X	50
Sliding or spinning tires, brake steering	_____ X	100
Rough clutch engagement	_____ X	25
Clashing of gears when shifting	_____ X	25
Stalling of the engine	_____ X	10
Excessive engine speed	_____ X	25
Excessive tractor speed	_____ X	50
Standing while tractor is moving	_____ X	100
Moving tractor with brakes on	_____ X	25
Failure to put in gear or park when getting off with engine stopped	_____ X	50
Riding the clutch	_____ X	25
Any unsafe conduct while on or around tractor	_____ X	25
Fouling equipment (touching spreader w/tractor wheel)	_____ X	50
Rubbing hard	_____ X	75

Sub Total of Deductions _____

If the contestant does not finish within the ten-minute time period, they will be given a **500-point deduction**.

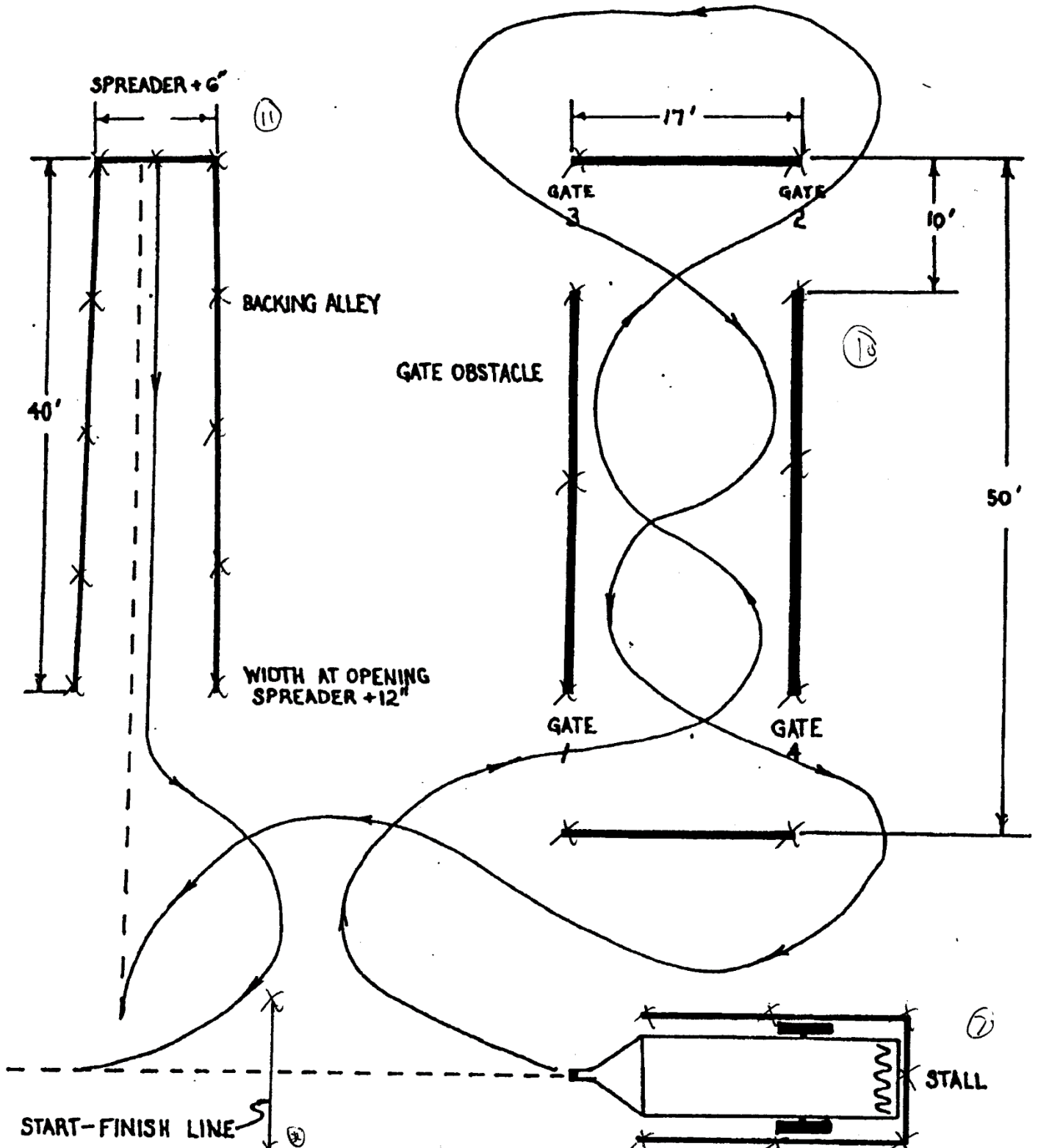
If the contestant does not finish within 15 minute, the contestant is stopped and is disqualified on this event.

Time deduction - Convert minutes into seconds, add the remaining seconds. Divide the total seconds by 3.

To this add the subtotal for deductions to get the final score of the contestant.

TIME _____ **Deduction** _____ **+Sub Total** _____ **=TOTAL** _____

COURSE LAYOUT - TWO WHEEL MANURE SPREADER EVENT



1, 2, 3 AND 4 - GATES 10 FEET WIDE
 BOARD ACROSS END OF STALL
 AT BEATER HEIGHT
 DOTTED LINES INDICATE
 REVERSE

3" CLEARANCE ON ALL
 SIDES & THE END OF STALL

**DELAWARE FFA/4-H SAFE TRACTOR / EQUIPMENT OPERATING
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Score Sheet Four-Wheel Trailer Event

Contestant Name/Number: _____ Chapter / Club: _____

BEFORE STARTING TRACTOR (verbal response)

Deductions

Check fuel and oil gauge	_____ X	10
Check brakes - depress brake pedal with engine running, tractor in gear	_____ X	10
Check tires - by sight only	_____ X	10
Check hazards - dirt, grease, tools, improper attachments, etc	_____ X	10
Check safety belts	_____ X	10
Check ROPS	_____ X	25

STARTING

Transmission not in Neutral/ Park	_____ X	25
Brakes not set	_____ X	25
Clutch not disengaged	_____ X	15

TRAILER HANDLING

For each time tractor or trailer touches obstacles or lines	_____ X	50
For each time tractor or trailer knocks down obstacles or crosses lines	_____ X	100
For each unnecessary change of direction (forward or backward)	_____ X	50
For each time tractor fouls equipment (touching trailer tongue with tractor tire, sliding trailer wheels sideways)	_____ X	50

TRAILER PLACEMENT IN SHED

For each inch off center at the front of trailer	_____ X	10
For each inch off center at the rear of trailer	_____ X	10
For each inch off from rear of stall over (3) inches	_____ X	10

PARKING TRACTOR AT FINISH LINE

Failure to set brakes	_____ X	50
Failure to place transmission in gear or park	_____ X	50
Failure to reduce throttle	_____ X	10

JUDGES OBSERVE AT ALL TIMES DURING ABOVE OPERATIONS

Failure to use seat belt		DISQUALIFY
Failure to adhere to the designated path through the course		DISQUALIFY
Improper mount/dismount	_____ X	50
Failure to set brakes when getting off/or put in Park	_____ X	50
Sliding or spinning tires, brake steering	_____ X	100
Rough clutch engagement	_____ X	25
Clashing of gears when shifting	_____ X	25
Stalling of the engine	_____ X	10
Excessive engine speed	_____ X	25
Excessive tractor speed	_____ X	50
Standing while tractor is moving	_____ X	100
Moving tractor with brakes on	_____ X	25
Failure to put in gear or park when getting off with engine stopped	_____ X	50
Riding the clutch	_____ X	25
Any unsafe conduct while on or around tractor	_____ X	25
Rubbing hard	_____ X	75

Sub Total of Deductions _____

If the contestant does not finish within the ten-minute time period, they will be given a **500-point deduction**.

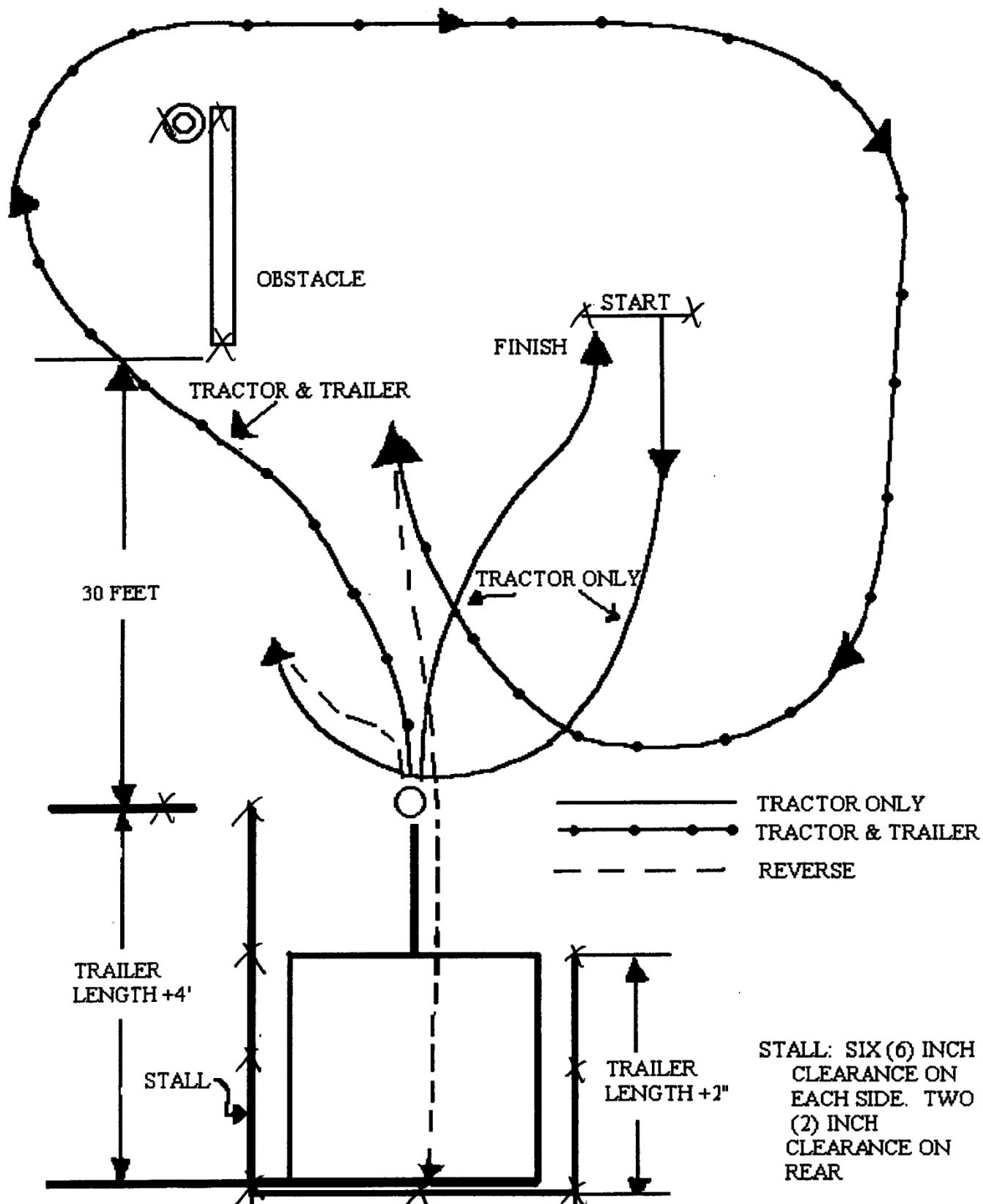
If the contestant does not finish within 15 minute, the contestant is stopped and is disqualified on this event.

Time deduction - Convert minutes into seconds, add the remaining seconds. Divide the total seconds by 3.

To this add the subtotal for deductions to get the final score of the contestant.

TIME _____ **Deduction** _____ **+Sub Total** _____ **=TOTAL** _____

COURSE LAYOUT - FOUR WHEEL TRAILER EVENT



**DELAWARE FFA/4-H SAFE TRACTOR / EQUIPMENT OPERATING
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Score Sheet Tractor Loader Event

Contestant Name/Number: _____ Chapter / Club: _____

BEFORE STARTING TRACTOR (verbal response)

Deductions

Check fuel and oil gauge	_____X	10
Check brakes - depress brake pedal with engine running, tractor in gear	_____X	10
Check tires - by sight only	_____X	10
Check hazards - dirt, grease, tools, improper attachments, etc	_____X	10
Check safety belts	_____X	10
Check ROPS	_____X	25

STARTING

Transmission not in Neutral/ Park	_____X	25
Brakes not set	_____X	25
Clutch not disengaged	_____X	15

LOADING

For touching line or obstacle (with tractor or loader)	_____X	50
For crossing or knocking down obstacles	_____X	100
For each unnecessary change of direction (forward or backwards)	_____X	50
Traveling with loader too high	_____X	50
Excessive speed going into pile	_____X	50
Moving load barrier	_____X	50
Improper use of bucket while loading	_____X	50
Not a full bucket of material	_____X	25

DUMPING LOAD

Carrying load at unsafe height	_____X	100
Unsafe speed approaching dumping area	_____X	50
Hitting or damaging dumping barrier	_____X	100
Bucket not completely empty	_____X	25

PARKING TRACTOR AT FINISH LINE

Failure to set brakes	_____X	50
Failure to place transmission in gear or park	_____X	50
Failure to reduce throttle	_____X	10
Bucket not completely down	_____X	50

JUDGES OBSERVE AT ALL TIMES DURING ABOVE OPERATIONS

Failure to use seat belt		DISQUALIFY
Failure to adhere to the designated path through the course		DISQUALIFY
Improper mount/dismount	_____X	50
Sliding or spinning tires, brake steering	_____X	100
Rough clutch engagement	_____X	25
Clashing of gears when shifting	_____X	25
Stalling of the engine	_____X	10
Excessive engine speed	_____X	25
Excessive tractor speed	_____X	50
Standing while tractor is moving	_____X	100
Moving tractor with brakes on	_____X	25
Failure to put in gear or park when getting off with engine stopped	_____X	50
Riding the clutch	_____X	25
Any unsafe conduct while on or around tractor	_____X	25

Sub Total of Deductions _____

If the contestant does not finish within the ten-minute time period, they will be given a **500-point deduction**.

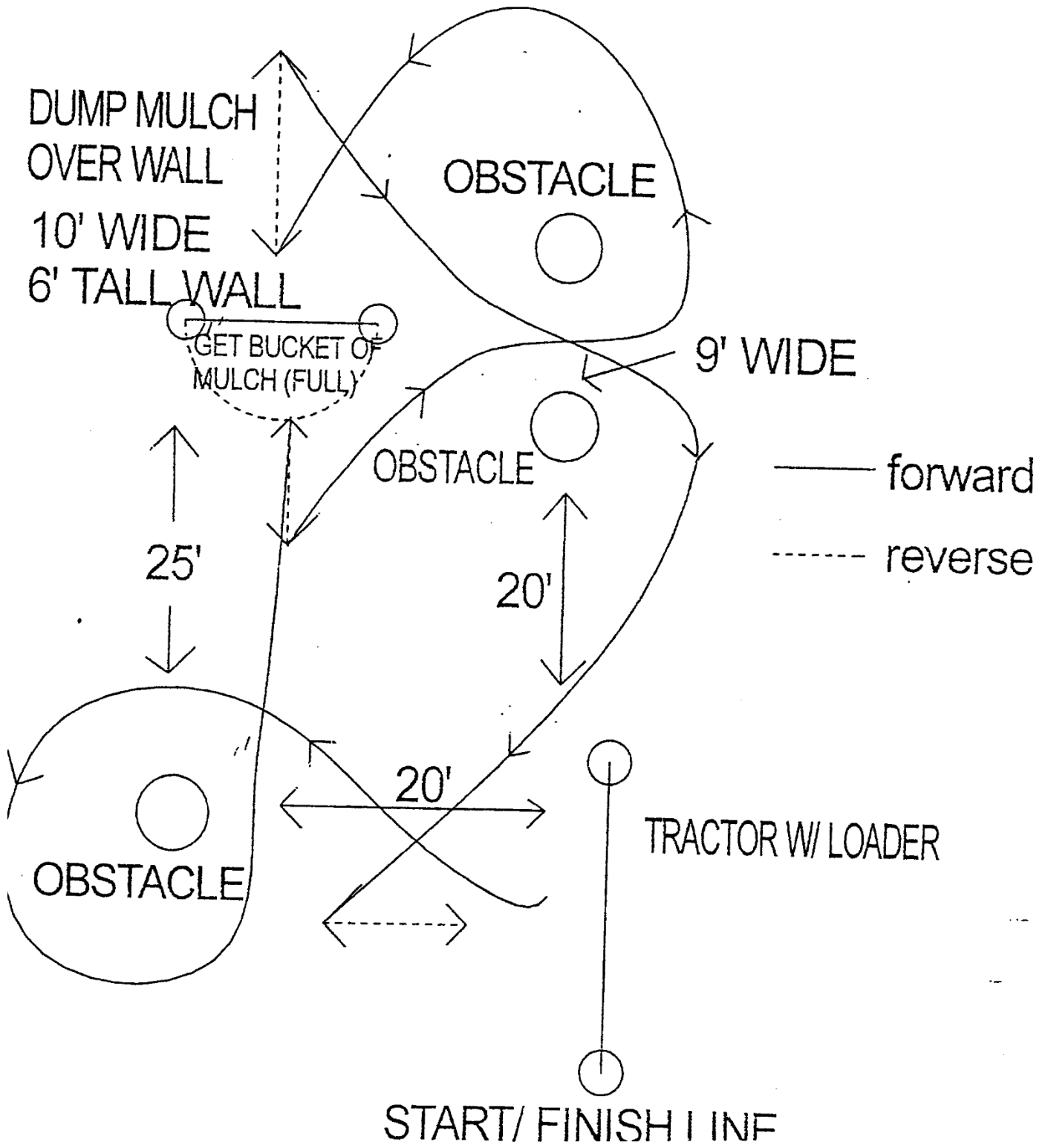
If the contestant does not finish within 15 minute, the contestant is stopped and is disqualified on this event.

Time deduction - Convert minutes into seconds, add the remaining seconds. Divide the total seconds by 3.

To this add the subtotal for deductions to get the final score of the contestant.

TIME _____ **Deduction** _____ **+Sub Total** _____ **=TOTAL** _____

TRACTOR LOADER EVENT



**DELAWARE FFA/4-H SAFE TRACTOR / EQUIPMENT OPERATING
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Score Sheet Skid-Steer Event

Contestant Name/Number: _____ Chapter / Club: _____

BEFORE STARTING SKID LOADER (verbal response) **Deductions**

Check fuel and oil gauge	_____X	10
Check brakes - depress brake pedal with engine running, tractor in gear	_____X	10
Check tires - by sight only	_____X	10
Check hazards - dirt, grease, tools, improper attachments, etc	_____X	10
Check safety belts/harness	_____X	10

STARTING

Improper mount/dismount	_____X	50
Throttle set too high	_____X	25

LOADING

For touching line or obstacle (with skid-steer or forks)	_____X	50
For crossing or knocking down obstacles	_____X	100
For each unnecessary change of direction (forward or backwards)	_____X	50
Traveling with forks too high	_____X	50
Excessive speed going into pallets	_____X	50
Moving pallets (more than four (4) inches)	_____X	50
Improper use of forks while loading	_____X	50

NAVIGATING COURSE

Excessive water loss from bucket (more than three (3) inches)	_____X	50
Tipping bucket of water off pallet	_____X	300
**** Operator must return to bucket station to get a new full bucket		
Carrying load at unsafe height	_____X	50
Pallet #1 not squarely on pallet #2	_____X	25
Excessive speed over obstacle	_____X	50
Pallets not squarely on platform	_____X	25
Unsafe speed approaching platform	_____X	50
Excessive bucking on turns and going over obstacles	_____X	50

PARKING SKID-LOADER AT FINISH LINE

Failure to reduce throttle	_____X	10
Forks not completely down	_____X	50

JUDGES OBSERVE AT ALL TIMES DURING ABOVE OPERATIONS

Failure to use seat belt/safety bar	DISQUALIFY
Failure to adhere to the designated path through the course	DISQUALIFY
Failure to operate skid loader safely	_____X 100
Excessive skid- steer speed	_____X 50

Sub Total of Deductions _____

If the contestant does not finish within the ten-minute time period, they will be given a **500-point deduction**.

If the contestant does not finish within 15 minute, the contestant is stopped and is disqualified on this event.

Time deduction - Convert minutes into seconds, add the remaining seconds. Divide the total seconds by 3.

To this add the subtotal for deductions to get the final score of the contestant.

TIME _____ **Deduction** _____ **+Sub Total** _____ **=TOTAL** _____

SKID-STEER EVENT

Forward 
Reverse 

