# Learner Workbook Student copy

# Front End Loader-Wheeled TICKET



Training support material for:

RIIMPO321F Conduct civil construction wheeled front end loader operations



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### Introduction to Wheeled Front End Loader



#### What do you use a front end loader for?

- Agriculture farming
- Construction
- Clean up
- Moving dirt/rocks etc
- Can use for lifting purposes



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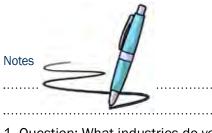
#### What industries do you use a front end loader in?

Civil construction

Mining







1. Question: What industries do you use a front end loader in?
Answer:

#### An example of a wheeled front end loader

A wheeled front end loader is a type of machine, that has a front-mounted square wide bucket connected to the end of two booms (arms) to scoop up loose material such as dirt, sand or gravel and move it from one place to another without pushing the material across the ground.

A wheeled front end loader is commonly used to move material from ground level and deposit it into an awaiting dump truck, stockpile or into an open trench excavation.

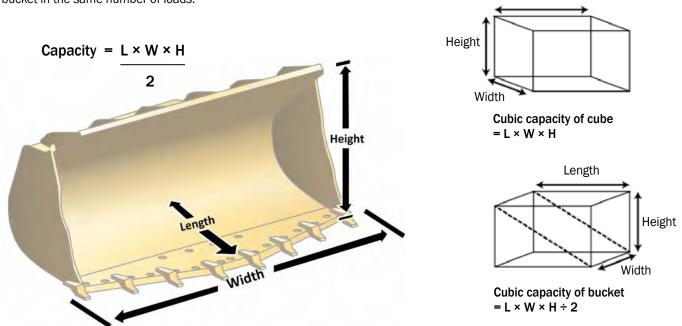
Front end loaders can also come in tracked models (refer RIIMPO322 Conduct civil construction tracked front end loader operations). Dump cylinder Tilt link Bucket REPRESENTER OF THE Rear wheel Lift cylinder Lift arm Front wheel Notes ..... ..... 2. Question: What is a front end loader commonly used for? Answer: • • •

Calculations (continued)

#### How to find the cubic capacity of a bucket

5

The planner must know the capacity of the loader bucket to be able to plan the job. For example, a machine with a larger bucket will move more material than a smaller bucket in the same number of loads.



Length

Cubic capacity is ÷ 2 because of the shape of the bucket (a triangular prism)

Notes
33. Question: What is the formula for finding the cubic metre capacity of a bucket?
Answer:

## Identify and control hazards

Chapter 2



How do you safely get in and out of the loader's cabin?

Always use three (3) points of contact facing the machine. For example, use two hands and one foot or two feet and one hand.



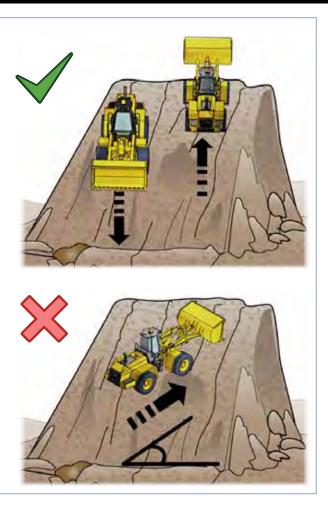


3 point contact (both hands and foot)

58. Question: How many points of contact should you have if you get in or out a front end loader?
Answer:

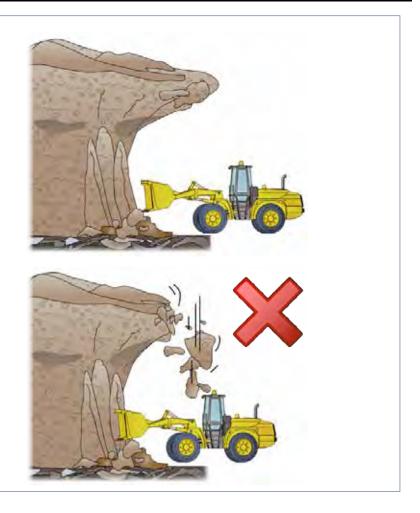
Which way should you travel when driving on sloping ground?

Go straight up or down the hill, not at an angle.



59. Question: Which way should you travel when driving on sloping ground?
Answer:

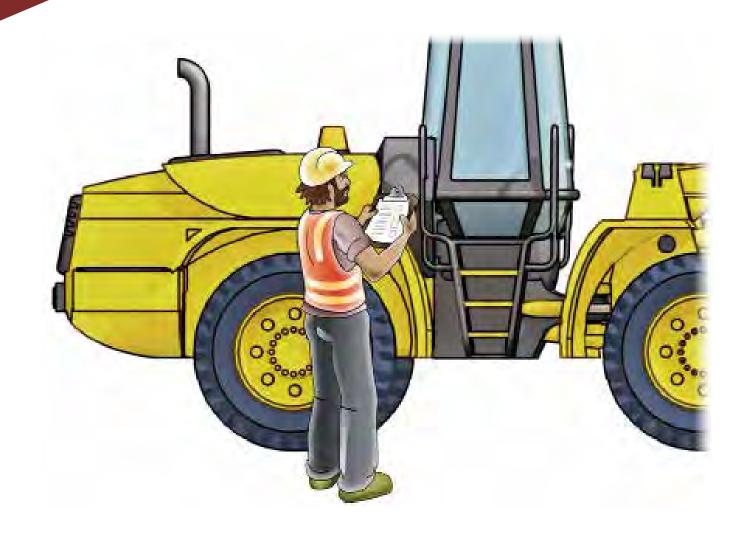
What might happen if you undercut a stockpile, trench or bank? It could collapse.



77. Question: What might happen if you undercut a stockpile, trench or bank?
Answer:

### Check and monitor equipment

**Chapter 3** 



When do you test and inspect the front end loader? Every day. Always test and inspect before you use the loader. You do this to make sure it's safe to use.



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78. Question: How often shoudl you inspect and test the front end loader? Answer:		
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	Answer:	