Question 1

The load to be moved is a pallet of stacked cartons:

- Five cartons to a layer.
- Six layers on a pallet.
- Each carton is 22 kg.
- The pallet weighs 50 kg.

What is the combined weight of the cartons and pallet?

Show all calculations.

Question 2

The load to be moved is a pallet of stacked drums:

- Four drums on the pallet.
- Each drum weighs 315 kg.
- The pallet weighs 35 kg.

What is the combined weight of the drums and pallet?

Show all calculations.

Question 3

The load to be moved is bags of concrete stacked on a pallet:

- 78 bags on the pallet.
- Each bag weighs 30 kg.
- The pallet weighs 50 kg.

What is the combined weight of the bags and pallet?

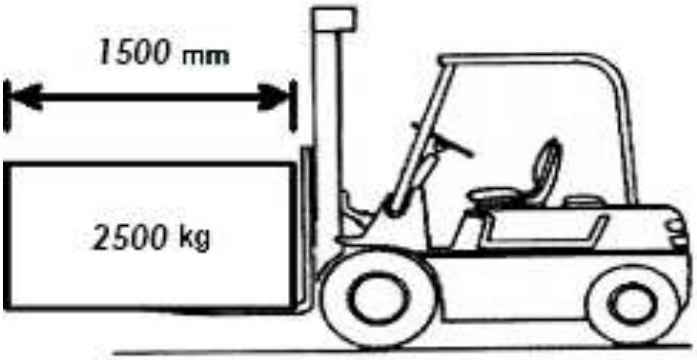
Show all calculations.

Question 4

The forklifts in the diagram in **bellow** are rated at 2500 kg at 600 mm load centre. Which

load is within the capacity of the forklift?

A



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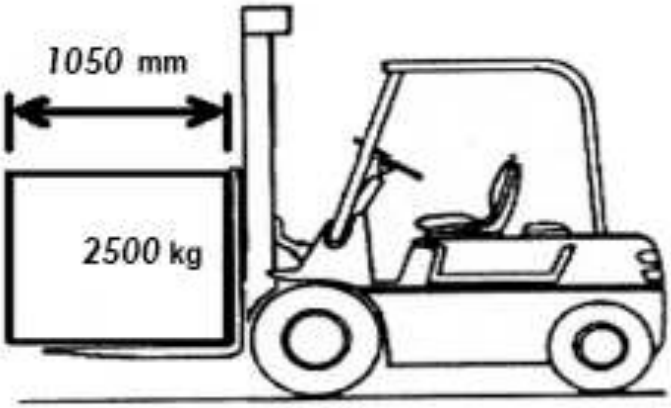
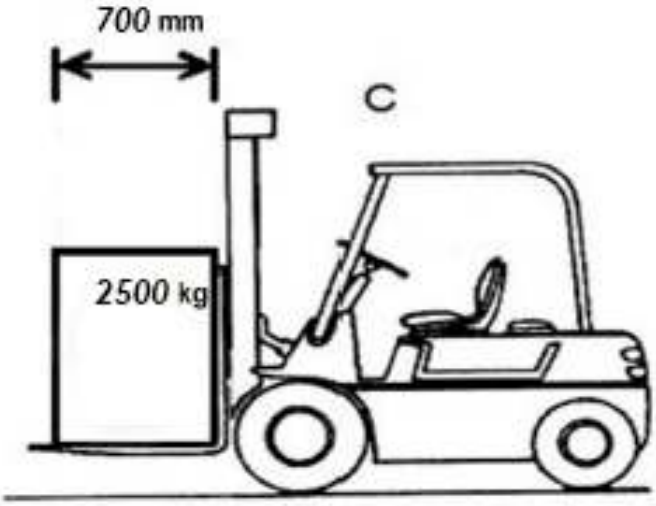




Question 5

What is the rated capacity the fork can lift with the mast tilted forward 3 degrees?

Question 6

What is the rated capacity the fork can lift with the mast in a vertical position?

Question 7

Can a load weighing 11234 kg, and with a load centre of 700 mm, be raised with the mast in the vertical position?

Question 8

Can a load weighing **more** than 10000 kg be raised with the mast in the vertical position?

Question 9

Your forklift has the following capacity/load plate:

WARNING

Trained Operators and Mechanics Only

Read Operating Manual located on seat or in operator's compartment

Failure to follow operating, inspection, and maintenance instruction can cause serious injury or death!

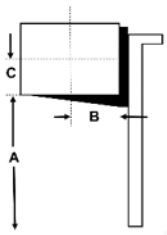
CAPACITY WITH MAST VERTICAL AND EQUIPPED AS SHOWN

Lift Truck Model **GDLRAIS155KXH123**
Serial No. ABXYZ14325

Attachment: **1981 mm (78in) Carriage + Sideshifting Fork Positioner NMHG 70L-FPS-c205 + 1830 mm Forks**
Truck Weight **9750** kg
Tread Width **1844** mm
Back Tilt **10.0** Degrees

Tyre	Front	Rear
Size	**8.25-15/14-PLY Dual Pneu**	**8.25-15/14-PLY Dual Pneu**
Pressure	**800 KPA (116 PSI)**	**800 KPA (116 PSI)**

MAXIMUM CAPACITY	Load Height Dim. A	Load Centre	
		Dim. B	Dim. C
6130 kg	4400 mm	915 mm	915 mm
0 kg	0 mm	0 mm	0 mm



For each load below, complete the required **calculations and/or reasoning** to determine whether the load is safe to lift. You **must** show your calculations and indicate your answer with a yes or no to the question with a tick (✓).

Load	Calculations/Reason	Is this load safe to lift?
Load 1 A pallet 1265mm length by 1265mm width with a height of 1900 mm and a total weight of 1800 kg.		❑ Yes ❑ No
Load 2 A container containing a 6500 kg load. Note: The tare weight on the container is 2300 kg. The container size is 2.4m wide, 2.5m high and 2.4m long.		❑ Yes ❑ No

Question 10

The load to be moved is a pallet of stacked cartons:

- Six cartons to a layer.
- Four layers on a pallet.
- Each carton is 18 kg.
- The pallet weighs 45 kg.

What is the combined weight of the cartons and pallet?

Show all calculations.

Question 11

The load to be moved is a pallet of stacked drums:

- Three drums on the pallet.
- Each drum weighs 215 kg.
- The pallet weighs 35 kg.

What is the combined weight of the drums and pallet?

Show all calculations.

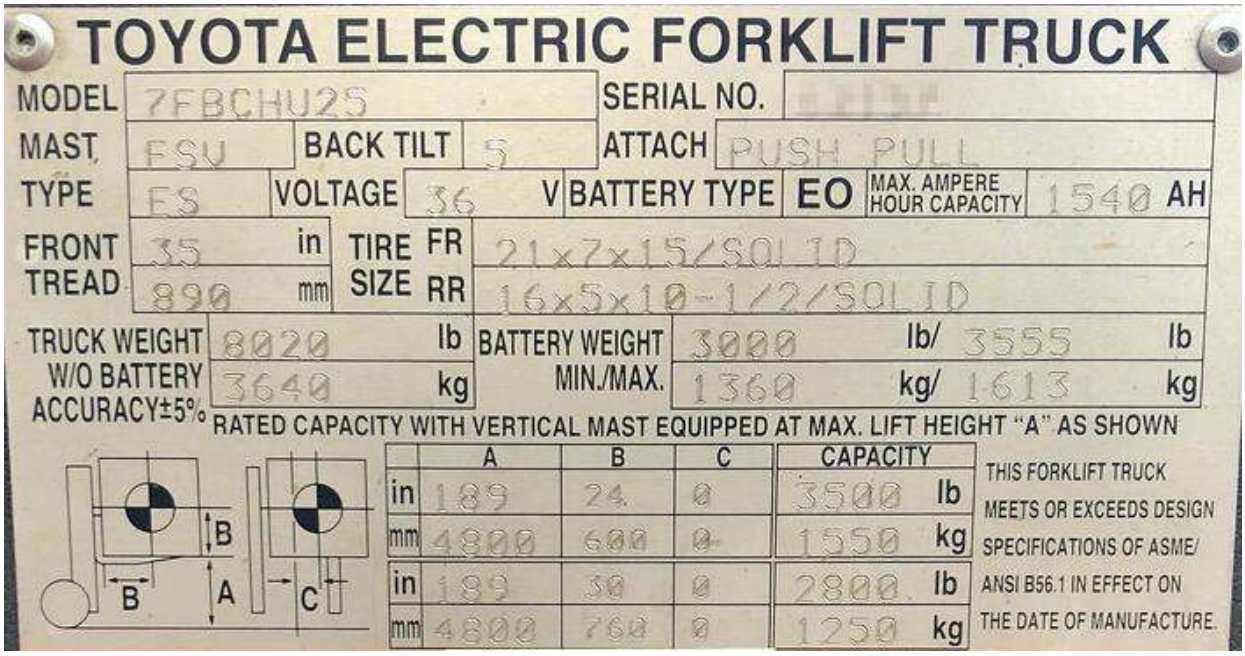
Question 12

The load to be moved is bags of concrete stacked on a pallet:

- 62 bags on the pallet.
- Each bag weighs 25 kg.
- The pallet weighs 50 kg.

What is the combined weight of the bags and pallet?

Show all calculations.



TOYOTA ELECTRIC FORKLIFT TRUCK

MODEL	7FBCHU25			SERIAL NO.					
MAST	FSV	BACK TILT	5	ATTACH	PUSH PULL				
TYPE	ES	VOLTAGE	36 V	BATTERY TYPE	EO	MAX. AMPERE HOUR CAPACITY	1540 AH		
FRONT TREAD	35 in / 890 mm	TIRE SIZE	FR	21x7x15/SOLID					
			RR	16x5x10-1/2/SOLID					
TRUCK WEIGHT W/O BATTERY	8020 lb / 3640 kg	BATTERY WEIGHT MIN./MAX.		3000 lb/ 3555 lb					
				1360 kg/ 1613 kg					

ACCURACY±5%

RATED CAPACITY WITH VERTICAL MAST EQUIPPED AT MAX. LIFT HEIGHT "A" AS SHOWN

	A	B	C	CAPACITY
in	189	24	0	3500 lb
mm	4800	600	0	1550 kg
in	189	30	0	2800 lb
mm	4800	760	0	1250 kg

THIS FORKLIFT TRUCK MEETS OR EXCEEDS DESIGN SPECIFICATIONS OF ASME/ ANSI B56.1 IN EFFECT ON THE DATE OF MANUFACTURE.

Question 13

What is the rated capacity the fork can lift with the mast tilted forward 3 degrees?

Question 14

What is the rated capacity the fork can lift with the mast in a vertical position?

Question 15

Can a load weighing 1560 kg, and with a load centre of 800 mm, be raised with the mast in the vertical position?

Question 16

Can a load weighing **more** than 1550 kg be raised with the mast in the vertical position?

Question 17

Your forklift has the following capacity/load plate:

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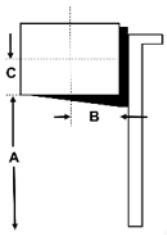
CAPACITY WITH MAST VERTICAL AND EQUIPPED AS SHOWN

Lift Truck Model **GDLRAIS155KXH123**
Serial No. ABXYZ14325

Attachment: **1981 mm (78in) Carriage + Sideshifting Fork Positioner NMHG 70L-FPS-c205 + 1830 mm Forks**
Truck Weight **9750** kg
Tread Width **1844** mm
Back Tilt **10.0** Degrees

Tyre	Front	Rear
Size	**8.25-15/14-PLY Dual Pneu**	**8.25-15/14-PLY Dual Pneu**
Pressure	**800 KPA (116 PSI)**	**800 KPA (116 PSI)**

MAXIMUM CAPACITY	Load Height Dim. A	Load Centre	
		Dim. B	Dim. C
6130 kg	4400 mm	915 mm	915 mm
0 kg	0 mm	0 mm	0 mm



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Load	Calculations/Reason	Is this load safe to lift?
Load 1 A pallet 1265mm length by 1265mm width with a height of 1650 mm and a total weight of 1900 kg.		❑ Yes ❑ No
Load 2 A container containing a 6000 kg load. Note: The tare weight on the container is 2300 kg. The container size is 2.4m wide, 2.5m high and 2.4m long.		❑ Yes ❑ No

Question 18

The load to be moved is a pallet of stacked cartons:

- Five cartons to a layer.
- Four layers on a pallet.
- Each carton is 28 kg.
- The pallet weighs 60 kg.

What is the combined weight of the cartons and pallet?

Show all calculations.

Question 19

The load to be moved is a pallet of stacked drums:

- Five drums on the pallet.
- Each drum weighs 275 kg.
- The pallet weighs 50 kg.

What is the combined weight of the drums and pallet?

Show all calculations.

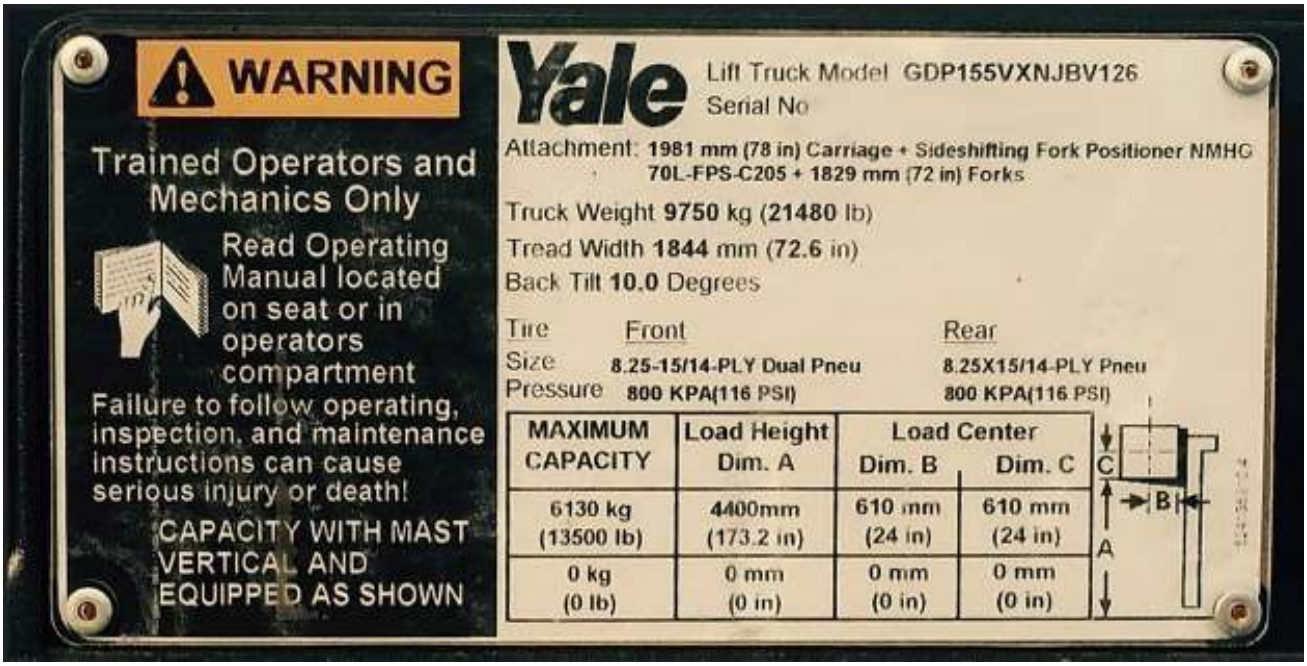
Question 20

The load to be moved is bags of concrete stacked on a pallet:

- 92 bags on the pallet.
- Each bag weighs 15 kg.
- The pallet weighs 35 kg.

What is the combined weight of the bags and pallet?

Show all calculations.



Question 21

What is the rated capacity the fork can lift with the mast tilted forward 3 degrees?

Question 22

What is the rated capacity the fork can lift with the mast in a vertical position?

Question 23

Can a load weighing 6130 kg, and with a load centre of 700 mm, be raised with the mast in the vertical position?

Question 24

Can a load weighing **more** than 6130 kg be raised with the mast in the vertical position?

Question 25

Your forklift has the following capacity/load plate:

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CAPACITY WITH MAST VERTICAL AND EQUIPPED AS SHOWN

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MAXIMUM CAPACITY	Load Height Dim. A	Load Centre	
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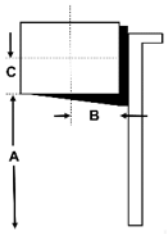
6130 kg	4400 mm	915 mm	915 mm
0 kg	0 mm	0 mm	0 mm



For each load below, complete the required **calculations and/or reasoning** to determine whether the load is safe to lift. You **must** show your calculations and indicate your answer with a yes or no to the question with a tick (✓).

Load	Calculations/Reason	Is this load safe to lift?
Load 1 A pallet 1090mm length by 1650 mm width with a height of 1350 mm and a total weight of 3200 kg.		❑ Yes ❑ No
Load 2 A container containing a 4950 kg load. Note: The tare weight on the container is 2300 kg. The container size is 2.4m wide, 2.5m high and 2.4m long.		❑ Yes ❑ No