

**CHECK YOUR PROGRESS
ENGINEERING 1**

(printable pdf)

NAME:
(answers)

View

[TDMMR3007B](#)

1 Operate and carry out basic service checks on small vessel marine propulsion systems

[TDMMR3107B](#)

2 Operate and carry out basic servicing on auxiliary systems

[TDMMR3207B](#)

3 Operate and carry out basic routine servicing of marine extra low/low voltage electrical systems

TDMMR3007B PROPULSION

Question 1 (1 Mark) Validates to TDMMR3007B element 1a

Before starting a motor you should consult the manufacturer's _____ manual.

Question 2 (1 Mark) Validates to TDMMR3007B element 1a

To test the serviceability a vessel's propulsion system it must be continuously run at:

- a. full load
- b. overload
- c. operating load
- d. without load

Question 3 (1 Mark) Validates to TDMMR3007B element 1a

A likely cause of an alarm continuing to sound after starting a small diesel engine is:

- a. low alternator charging
- b. motor overload
- c. low operating temperature
- d. low oil pressure

Question 4 (1 Mark) Validates to TDMMR3007B element 1a

Engine temperature and oil pressure gauges need not be monitored until underway.

TRUE

FALSE

Question 5 (1 Mark) Validates to TDMMR3007B element 1b

Tank contents is properly measured by sight gauge or _____ .

Question 6 (1 Mark) Validates to TDMMR3007B element 1b

Before departure, fuel tanks should be filled to:

- a. full
- b. half full
- c. sufficient for the voyage
- d. sufficient for the voyage plus 20% in reserve

Question 7 (4 Marks) Validates to TDMMR3007B element 1b

List four standard pre-departure checks for a small diesel engine:

Question 8 (1 Mark) Validates to TDMMR3007B element 1c

Bleeding a fuel system removes the:

- a. oil
- b. salt
- c. air
- d. water

Question 9 (1 Mark) Validates to TDMMR3007B element 1c

The quickest method to stop a small diesel engine is to:

- a. smother the air intake
- b. shut off the fuel
- c. engage the brake
- d. turn off the ignition

Question 10 (1 Mark) Validates to TDMMR3007B element 1c

During warm up of a water cooled engine, the heat exchanger's thermostat:

- a. isolates the raw water pump
- b. shuts down raw water flow
- c. increases raw water flow
- d. bypasses the heat exchanger

Question 11 (1 Mark) Validates to TDMMR3007B element 1c

A thermostat separates raw cooling water from cooling fresh water.

TRUE

FALSE

Question 12 (1 Mark) Validates to TDMMR3007B element 1c

In a diesel engines exhaust, blue exhaust smoke indicates unburnt fuel.

TRUE

FALSE

Question 13 (1 Mark) Validates to TDMMR3007B element 1c

In a diesel engines exhaust, white exhaust smoke indicates burning oil.

TRUE

FALSE

Question 13 (1 Mark) Validates to TDMMR3007B element 1c

In a diesel engines exhaust, black exhaust smoke indicates overload.

TRUE

FALSE

Question 14 (1 Mark) Validates to TDMMR3007B element 1c

Very high oil pressure on starting a diesel engine, indicates that the:

- a. oil filter bypass valve is faulty
- b. sump oil level is too high
- c. sump oil level is too low
- d. oil pressure relief valve is faulty

Question 15 (1 Mark) Validates to TDMMR3007B element 2a

The fuel and air mixture in a diesel engine is ignited by the:

- a. heat generated in the compression stroke
- b. heat supplied by the glow plug
- c. electronic ignition system
- d. spark plug

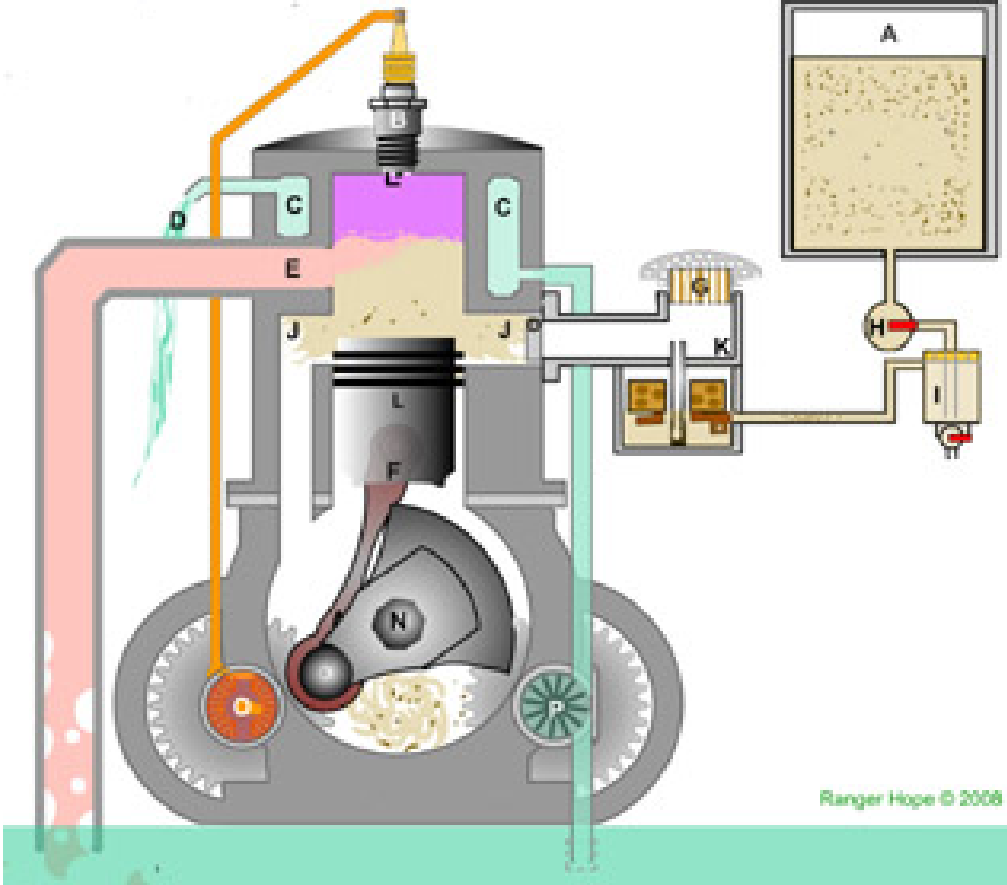
Question 16 (4 Marks) Validates to TDMMR3007B element 2a

Match the components of a petrol motor with the description on the right:

- | | |
|------------------|-------------------------------------|
| 1. Ignition coil | a. generates high voltage current |
| 2. Distributor | b. Ignites the fuel-air mixture |
| 3. Spark plugs | c. an electrical switch |
| 4. Solenoid | d. distributes high voltage current |

Question 17 (8 Marks) Validates to TDMMR3007B element 2a

Name the parts of a two stroke petrol engine labelled below:



A= _____

B= _____

C= _____

D= _____

E= _____

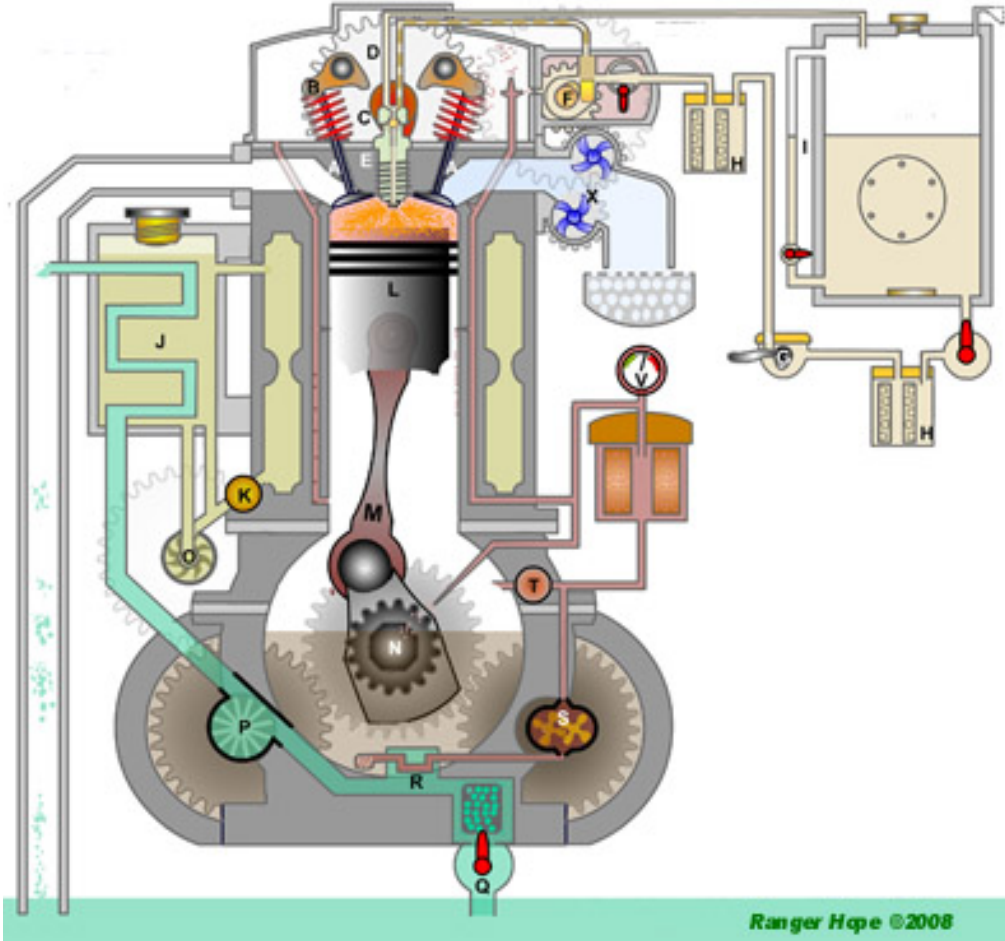
J= _____

L= _____

N= _____

Question 18 (8 Marks) Validates to TDMMR3007B element 2a

Name the parts of a four stroke diesel engine labelled below:



D= _____

C= _____

F= _____

J= _____

L= _____

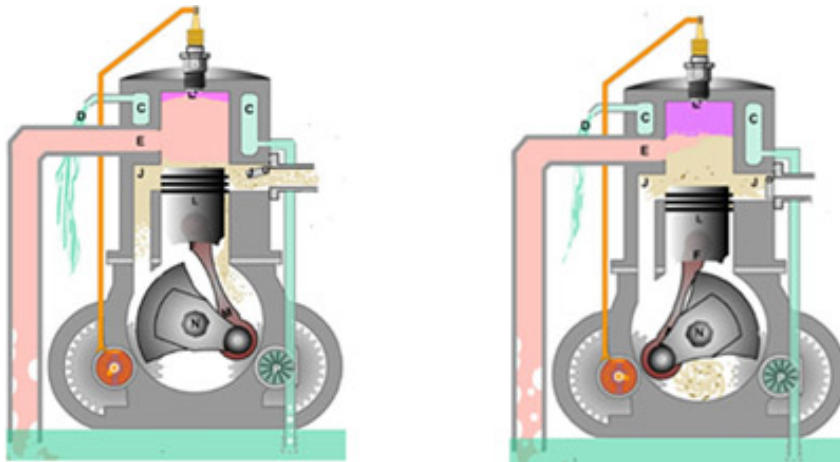
M= _____

K= _____

T= _____

Question 19 (2 Marks) Validates to TDMMR3007B element 2a

Name the two strokes of the diesel engine cycles labelled below, A, B, C & D:



A & B= _____

C & D= _____

Question 20 (1 Mark) Validates to TDMMR3007B element 2a

A four stroke diesel engine requires inlet and outlet valves.

TRUE

FALSE

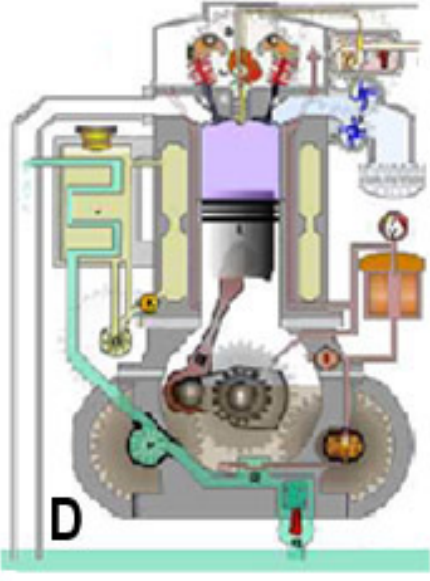
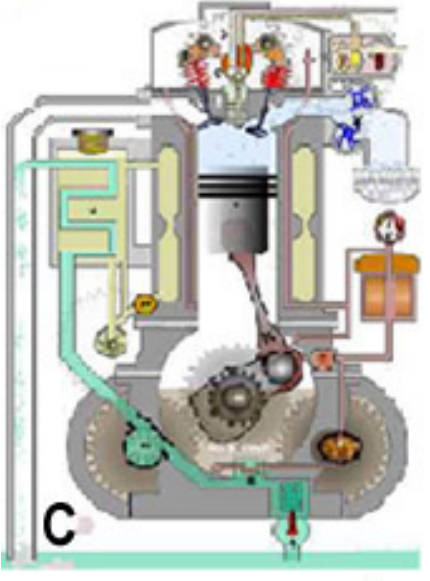
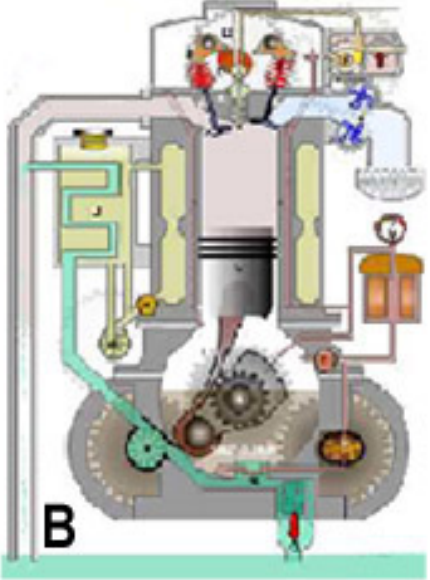
Question 21 (1 Mark) Validates to TDMMR3007B element 2a

A fuel oil transfer pump delivers fuel to the:

- a. daily service tank
- b. injectors
- c. double bottom tanks
- d. lubricating oil tank

Question 22 (4 Marks) Validates to TDMMR3007B element 2a

Name the four strokes of the diesel engine cycles labelled below, A, B, C & D:



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A= _____

B= _____

C= _____

D= _____

Question 23 (1 Mark) Validates to TDMMR3007B element 2a

Fuel tanks of more than 800 litres capacity, must have a _____ for inspections and cleaning.

Question 24 (1 Mark) Validates to TDMMR3007B element 2b

An oil injected two stroke outboard motor requires oil to be added in the fuel tank.

TRUE

FALSE

Question 25 (1 Mark) Validates to TDMMR3007B element 2b

A sight gauge:

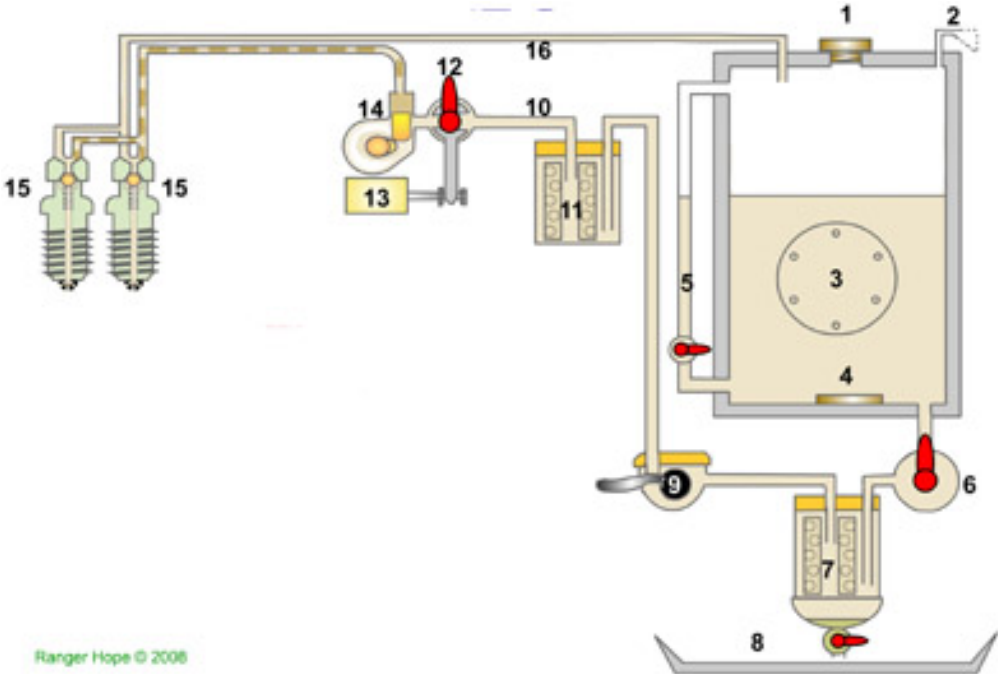
- a. must be left open
- b. must be made of glass
- c. must have a self closing valve at its lower end
- d. must be read hourly

Question 26 (1 Mark) Validates to TDMMR3007B element 2b

List three regular checks that you would make on the motor's status during a short passage:

Question 27 (15 Marks) Validates to TDMMR3007B element 2b

Name the parts of a diesel fuel system marked 1 - 15:



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1= _____

2= _____

3= _____

4= _____

5= _____

6= _____

7= _____

8= _____

9= _____

10= _____

11= _____

12= _____

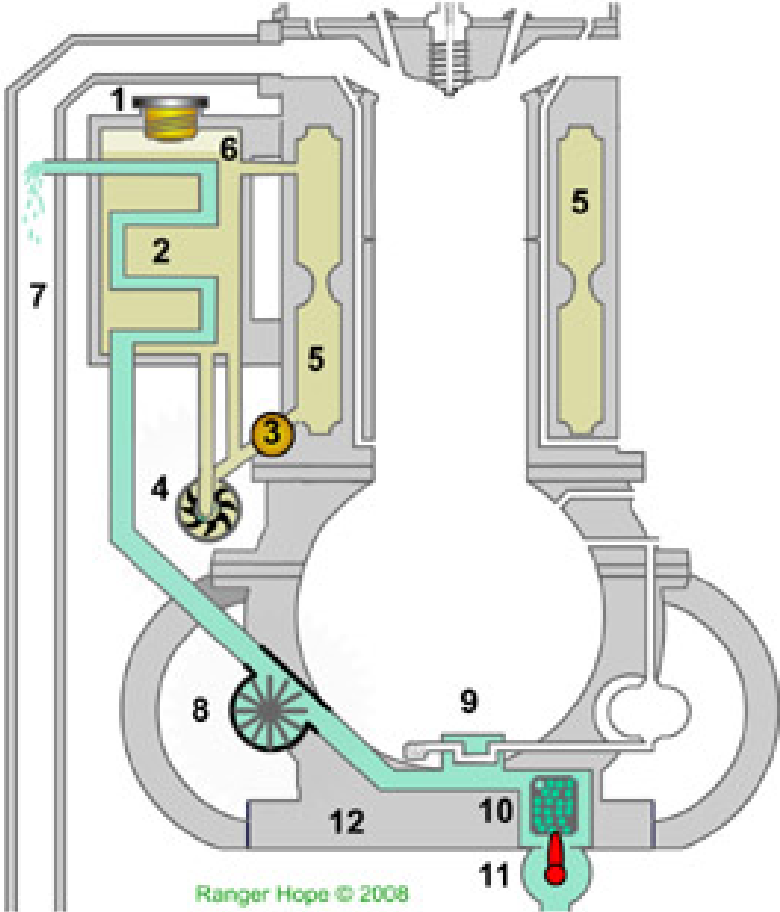
13= _____

14= _____

15= _____

Question 28 (12 Marks) Validates to TDMMR3007B element 2b

Name the parts of a cooling system marked 1 - 12:



1= _____

2= _____

3= _____

4= _____

5= _____

6= _____

7= _____

8= _____

9= _____

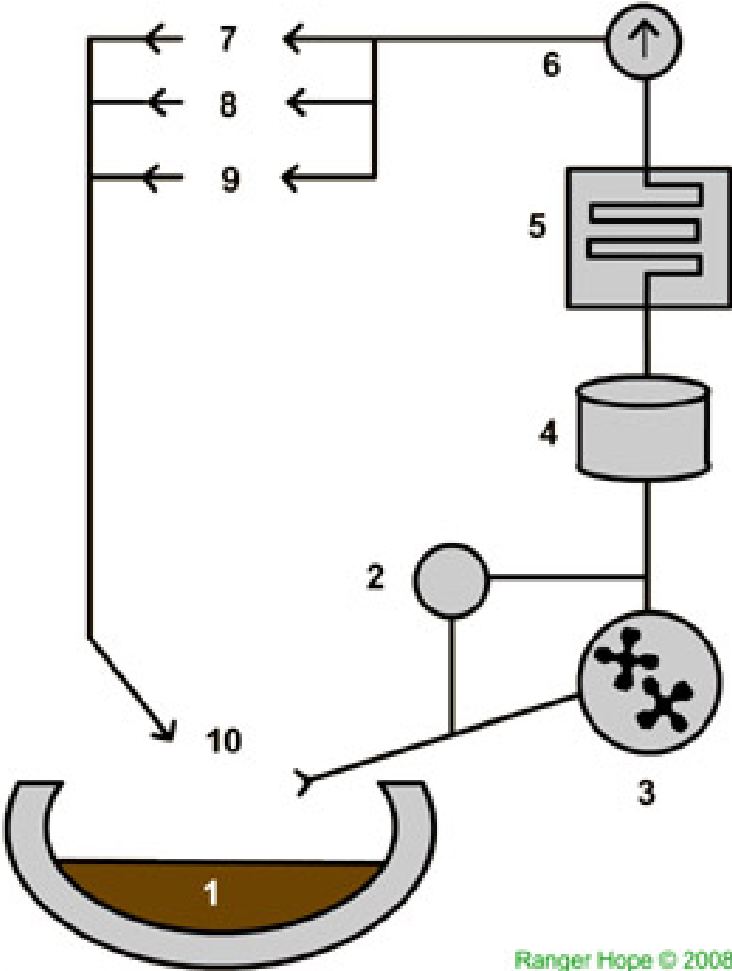
10= _____

11= _____

12= _____

Question 29 (10 Marks) Validates to TDMMR3007B element 2b

Name the parts of a lubrication system marked 1 - 10:



1= _____

2= _____

3= _____

4= _____

5= _____

6= _____

7= _____

8= _____

9= _____

10= _____

Question 30 (1 Mark) Validates to TDMMR3007B element 2c

Plastic fuel lines are permitted on commercial vessels.

TRUE

FALSE

Question 31 (1 Mark) Validates to TDMMR3007B element 2c

Define the following terms:

Inspection _____

Examination _____

Proof test _____

Isolate _____

Question 32 (1 Mark) Validates to TDMMR3007B element 3a

Mechanical items that are found to be faulty must be:

- a. tagged and repaired
- b. isolated, tagged and repaired or replaced
- c. repaired at the scheduled maintenance period
- d. left for the engineer to find

Question 32 (1 Mark) Validates to TDMMR3007B element 3a

A "save all":

- a. filters fuel
- b. collects fuel spills
- c. reduces oil consumption
- d. is a life float

Question 33 (1 Mark) Validates to TDMMR3007B element 3a

While re-fuelling _____ equipment must ready on hand and _____ signs present.

Question 34 (1 Mark) Validates to TDMMR3007B element 3a

Filler pipes are placed so that spillage does not _____ a vessel.

Question 35 (1 Mark) Validates to TDMMR3007B element 3a

The following precaution is not essential when re-fuelling.

- a. shut the engine room hatch
- b. turn off the battery switch
- c. ban smoking
- d. close the fuel line valve

Question 36 (1 Mark) Validates to TDMMR3007B element 3b

If the exhaust of your marine diesel motor starts to blow copious black smoke then you should reduce throttle.

TRUE

FALSE

Question 37 (1 Mark) Validates to TDMMR3007B element 3b

If your motor stopped one night within a busy channel, your first action would be to:

- a. row
- b. anchor
- c. display not under command lights
- d. display restricted in ability to manoeuvre lights

Question 38 (3 Marks) Validates to TDMMR3007B element 3b

A damage control plan can be summarised by the phrase to **FIRM** things up - Find the problem, inspect/isolate it, report/repair it and the monitor the repair.

Write a brief plan for the damage that I have found for you below.

F	You find that you have a large fuel spill entering the water during re-fuelling.
I	<hr/> <hr/> <hr/>
R	<hr/> <hr/> <hr/>
M	<hr/> <hr/> <hr/>

Question 39 (1 Marks) Validates to TDMMR3007B element 3c

Response is most effective if the crew are practiced in _____ drills.

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