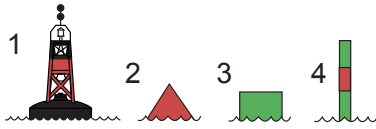


Class Exercises for Session 2*

Navigation Aids; Lights; Coordinates; Angles; Distances
Chapters 3, 4, 5, 6 and 7 of the Course book

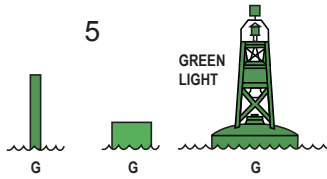
**See complimentary PowerPoint class presentation available for download from
www.MarineNavigationBooks.com*

2.1. Name and explain the following Aids to Navigation



1 spar can pillar cone

2 spar can pillar cone



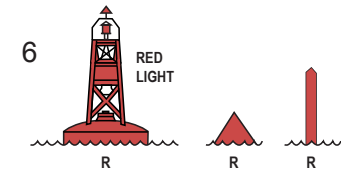
3 spar can pillar cone

4 spar can pillar cone

5

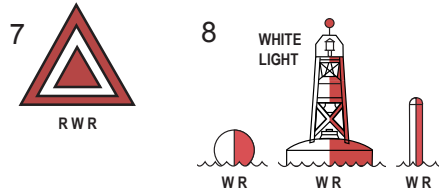
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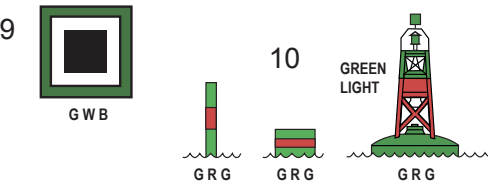
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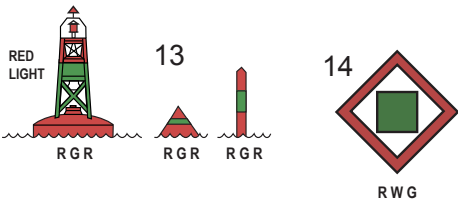
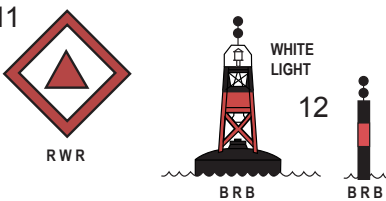
11



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14



15 _____

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23 _____

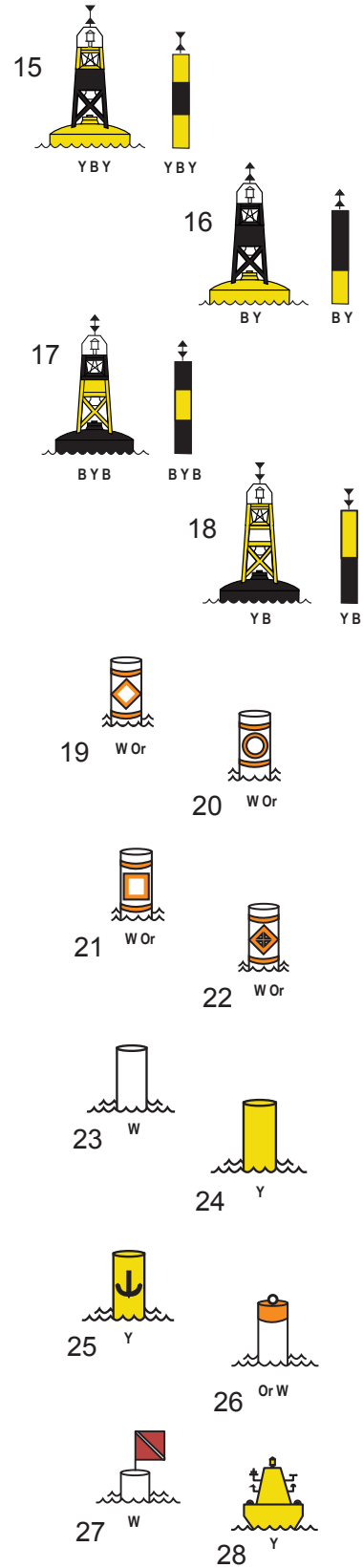
24 _____

25 _____

26 _____

27 _____

28 _____



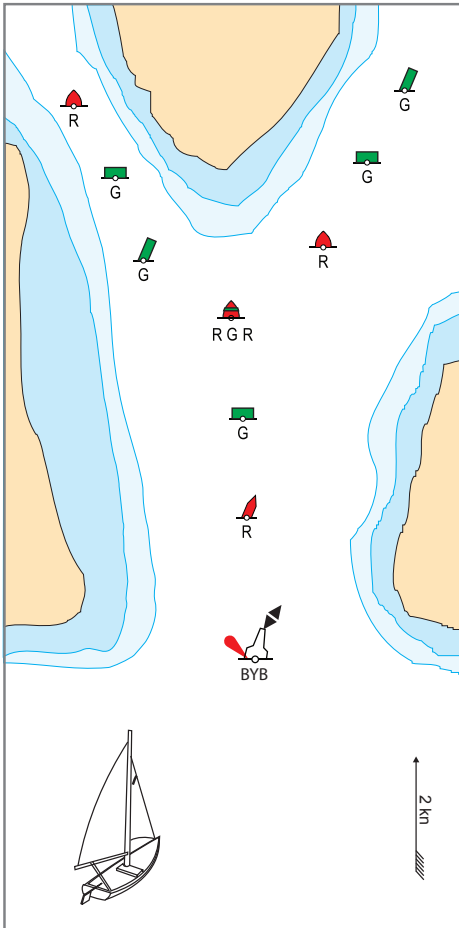


Fig. 1

2.2. Navigation Course

Using a dotted line, indicate the courses on the main channel, and the secondary channel. (Fig. 1).

2.3. Lights

Explain the light colour, sequence of the following lights, and the type of light it is:

a) GP Fl(2) 10s 25m 12M (U)

b) (Q(6) + LFl) 10s

c) Mo(A)

d) Fl(2) 10s

e) FIG or FIR

f) FIY

g) Q

h) VQ

i) FIG (2+1) 6s or FIR (2+1) 6s

2.4. Features

What features are found at the following positions:

- a) $49^{\circ} 20.1' N$; $123^{\circ} 21.7' W$ _____
- b) $49^{\circ} 08.0' N$; $123^{\circ} 49.0' W$ _____
- c) $48^{\circ} 53.0' N$; $123^{\circ} 28.2' W$ _____
- d) $49^{\circ} 13.0' N$; $123^{\circ} 53.4' W$ _____

2.5 Coordinates

What are the coordinates of the following points:

- a) Point Atkinson light (West Vancouver) Lat _____ Long _____
- b) Sand Heads light (SW of the airport; mouth of the Fraser River; end of Steveston jetty; vertical purple tear drop)
Lat _____ Long _____
- c) Thrasher Rock light (East of Gabriola Island)
Lat _____ Long _____
- d) Light on Entrance Island (North of Gabriola Island)
Lat _____ Long _____

2.6 Courses

What are the successive courses along the three segments described below ($^{\circ}T$):

- a) Q62 Red Bell buoy (off Point Grey and UBC) to Point Cowan light (to the NW, on Bowen Island) _____
- b) Point Cowan light to Thrasher Rock light (to the SW, across Georgia Strait, east of Gabriola Island) _____
- c) Thrasher Rock light to Sand Heads light (to the east, across Georgia Strait, at the end of the Steveston jetty) _____

2.7. Distances

What are the lengths of the three segments in exercise 2.6:

a) **Q62** Red Bell buoy to Point Cowan light _____

b) Point Cowan light to Thrasher Rock light _____

c) Thrasher Rock light to Sand Heads light _____