

**TEMA:** 0161 COMMERCIAL PILOT - (CH. 9) NAVIGATION

**COD PREG:** PREG20080530      **PREGUNTA:** The ADF is tuned to a nondirectional radiobeacon and the relative bearing changes from 090° to 100° in 2.5 minutes of elapsed time. If the true airspeed is 90 knots, th distance and time en route to that radiobeacon would be      **RPTA:** B

**OPCION A:** 15 miles and 22.5 minutes.  
**OPCION B:** 22.5 miles and 15 minutes.  
**OPCION C:** 32 miles and 18 minutes.

PREG20080531      **GIVEN:** A

Wingtip bearing change ..... 10°  
Elapsed time between bearing change ..... 4 min  
Rate of fuel consumption ..... 11 gal/hr

Calculate the fuel required to fly to the station.

**OPCION A:** 4.4 gallons.  
**OPCION B:** 8.4 gallons.  
**OPCION C:** 12 gallons.

PREG20080534      **GIVEN:** A

Wingtip bearing change ..... 15°  
Elapsed time between bearing change ..... 7.5 min  
True airspeed ..... 85 kts  
Rate of fuel consumption ..... 9.6 gal/hr

The time, distance, and fuel required to fly to the station is

**OPCION A:** 30 minutes; 42.5 miles; 4.80 gallons.  
**OPCION B:** 32 minutes; 48 miles; 5.58 gallons.  
**OPCION C:** 48 minutes; 48 miles; 4.58 gallons.

PREG20080533      **GIVEN:** A

Wingtip bearing change ..... 15°  
Elapsed time between bearing change ..... 6 min  
Rate of fuel consumption ..... 8.6 gal/hr

Calculate the approximate fuel required to fly to the station.

**OPCION A:** 3.44 gallons.  
**OPCION B:** 6.88 gallons.  
**OPCION C:** 17.84 gallons.

PREG20080535      While maintaining a constant heading, a relative bearing of 15° doubles in 6 minutes. The time to the station being used is      B

- 
- OPCION A:** 3 minutes.  
**OPCION B:** 6 minutes.  
**OPCION C:** 12 minutes.
- 

PREG20080529 If the relative bearing changes from 090° to 100° in 2.5 minutes of elapsed time, the time en route to that station would be **B**

**OPCION A:** 12 minutes.  
**OPCION B:** 15 minutes.  
**OPCION C:** 18 minutes.

---

PREG20080532 GIVEN: **B**

Wingtip bearing change ..... 5°  
Elapsed time between bearing change ..... 6 min  
Rate of fuel consumption ..... 12 gal/hr

The fuel required to fly to the station is

**OPCION A:** 8.2 gallons.  
**OPCION B:** 14.4 gallons.  
**OPCION C:** 18.7 gallons.

---

PREG20080528 The ADF is tuned to a nondirectional radiobeacon and the relative bearing changes from 085° to 090° in 2 minutes of elapsed time. The time en route to that station would be **C**

**OPCION A:** 15 minutes.  
**OPCION B:** 18 minutes.  
**OPCION C:** 24 minutes.

---

PREG20080519 Ref. Fig. 18 **B**  
If the airplane continues to fly on the heading as shown, what magnetic bearing FROM the station would be intercepted at a 35° angle outbound?

**OPCION A:** 035°.  
**OPCION B:** 070°.  
**OPCION C:** 215°.

---

PREG20080526 The ADF is tuned to a nondirectional radiobeacon and the relative bearing changes from 095° to 100° in 1.5 minutes of elapsed time. The time en route to that station would be **A**

**OPCION A:** 18 minutes.  
**OPCION B:** 24 minutes.  
**OPCION C:** 30 minutes.

---

PREG20080525 GIVEN: C

Wingtip bearing change ..... 5°  
Time elapsed between bearing change ..... 5 min  
True airspeed ..... 115 kts

The distance to the station is

- OPCION A:** 36 NM.
- OPCION B:** 57.5 NM.
- OPCION C:** 115 NM.

PREG20080524 With a TAS of 115 knots, the relative bearing on an ADF changes from 090° to 095° in 1.5 minutes of elapsed time. The distance to the station would be C

- OPCION A:** 12.5 NM.
- OPCION B:** 24.5 NM.
- OPCION C:** 34.5 NM.

PREG20080523 The ADF indicates a wingtip bearing change of 10° in 2 minutes of elapsed time, and the TAS is 160 knots. What is the distance to the station? B

- OPCION A:** 15 NM.
- OPCION B:** 32 NM.
- OPCION C:** 36 NM.

PREG20080522 The relative bearing on an ADF changes from 265° to 260° in two (2) minutes of elapsed time. If the groundspeed is 145 knots, the distance to that station would be: C

- OPCION A:** 26 NM.
- OPCION B:** 37 NM.
- OPCION C:** 58 NM.

PREG20080516 Ref Fig. 17 Which illustration indicates that the airplane should be turned 150° left to intercept the 360 radial at a 60° angle inbound? A

- OPCION A:** 1.
- OPCION B:** 2.
- OPCION C:** 3.

PREG20080494 GIVEN: B

True course ..... 345°  
True heading ..... 355°  
True airspeed ..... 85 kts  
Groundspeed ..... 95 kts

Determine the wind direction and speed.

- OPCION A:** 095° and 19 knots.
- OPCION B:** 113° and 19 knots.
- OPCION C:** 238° and 18 knots.

PREG20080493 GIVEN: A

True course ..... 105°  
True heading ..... 085°  
True airspeed ..... 95 kts  
Groundspeed ..... 87 kts

Determine the wind direction and speed.

- OPCION A:** 020° and 32 knots.
- OPCION B:** 030° and 38 knots.
- OPCION C:** 200° and 32 knots.

PREG20080492 If fuel consumption is 14.7 gallons per hour and groundspeed is 157 knots, how much fuel is required for an airplane to travel 612 NM? A

- OPCION A:** 58 gallons.
- OPCION B:** 60 gallons.
- OPCION C:** 64 gallons.

PREG20080491 If an airplane is consuming 14.8 pounds of fuel per hour at a cruising altitude of 7,500 feet and the groundspeed is 167 knots, how much fuel is required to travel 560 NM? A

- OPCION A:** 50 gallons.
- OPCION B:** 53 gallons.
- OPCION C:** 57 gallons.

PREG20080490 If an airplane is consuming 9.5 gallons of fuel per hour at a cruising altitude of 6,000 feet and the groundspeed is 135 knots, how much fuel is required to travel 490 NM? C

- OPCION A:** 27 gallons.
- OPCION B:** 30 gallons.
- OPCION C:** 35 gallons.

PREG20080488 If an airplane is consuming 95 pounds of fuel per hour at a cruising altitude of 6,500 feet and the groundspeed is 173 knots, how much fuel is required to travel 450 NM? A

- OPCION A:** 248 pounds.
- OPCION B:** 265 pounds.
- OPCION C:** 284 pounds.

PREG20080487 If fuel consumption is 80 pounds per hour and groundspeed is 180 knots, how much fuel is required for an airplane to travel 460 NM? A

- OPCION A:** 205 pounds.

**OPCION B:** 212 pounds.

**OPCION C:** 460 pounds.

PREG20080486 An airplane descends to an airport under the following conditions: C

Cruising altitude ..... 10,500 ft  
Airport elevation ..... 1,700 ft  
Descends to ..... 1,000 ft AGL  
Rate of descent ..... 600 ft/min  
Average true airspeed ..... 135 kts  
True course ..... 263°  
Average wind velocity ..... 330° at 30 kts  
Variation ..... 7°E  
Deviation ..... +3°  
Average fuel consumption ..... 11.5 gal/hr

Determine the approximate time, compass heading, distance, and fuel consumed during the descent.

**OPCION A:** 9 minutes, 274°, 26 NM, 2.8 gallons.

**OPCION B:** 13 minutes, 274°, 26 NM, 2.5 gallons.

**OPCION C:** 13 minutes, 271°, 26 NM, 2.5 gallons.

PREG20080484 An airplane descends to an airport under the following conditions: A

Cruising altitude ..... 6,500 ft  
Airport elevation ..... 700 ft  
Descends to ..... 800 ft AGL  
Rate of descent ..... 500 ft/min  
Average true airspeed ..... 110 kts  
True course ..... 335°  
Average wind velocity ..... 060° at 15 kts  
Variation ..... 3°W  
Deviation ..... +2°  
Average fuel consumption ..... 8.5 gal/hr

Determine the approximate time, compass heading, distance, and fuel consumed during the descent.

**OPCION A:** 10 minutes, 348°, 18 NM, 1.4 gallons.

**OPCION B:** 10 minutes, 355°, 17 NM, 2.4 gallons.

**OPCION C:** 12 minutes, 346°, 18 NM, 1.6 gallons.

PREG20080483 GIVEN: B

Pressure altitude ..... 7,000 ft  
True air temperature ..... +15°C

From the conditions given, the approximate density altitude is

**OPCION A:** 5,000 feet.

**OPCION B:** 8,500 feet.

**OPCION C:** 9,500 feet.

PREG20080482 GIVEN: B

Pressure altitude ..... 6,000 ft  
True air temperature ..... +30°F

From the conditions given, the approximate density altitude is

- OPCION A:** 9,000 feet.
- OPCION B:** 5,500 feet.
- OPCION C:** 5,000 feet.

PREG20080481 GIVEN: B

Pressure altitude ..... 5,000 ft  
True air temperature ..... +30°C

From the conditions given, the approximate density altitude is

- OPCION A:** 7,200 feet.
- OPCION B:** 7,800 feet.
- OPCION C:** 9,000 feet.

PREG20080480 GIVEN: B

Pressure altitude ..... 12,000 ft  
True air temperature ..... +50°F

From the conditions given, the approximate density altitude is

- OPCION A:** 11,900 feet.
- OPCION B:** 14,130 feet.
- OPCION C:** 18,150 feet.

PREG20080479 Which data must be recorded in the aircraft logbook or other record by a pilot making a VOR operational check for IFR operations? B

- OPCION A:** VOR name or identification, place of operational check, amount of bearing error, and date of check.
- OPCION B:** Date of check, place of operational check, bearing error, and signature.
- OPCION C:** VOR name or identification, amount of bearing error, date of check, and signature.

PREG20080478 When must an operational check on the aircraft VOR equipment be accomplished to operate under IFR? Within the preceding C

- OPCION A:** 30 days or 30 hours of flight time.
- OPCION B:** 10 days or 10 hours of flight time.
- OPCION C:** 30 days.

PREG20080477 What is the maximum bearing error (+ or -) allowed for an operational VOR equipment check when using an approved ground test signal? A

- OPCION A:** 4 degrees  
**OPCION B:** 8 degrees  
**OPCION C:** 12 degrees

PREG20080521 Ref. Fig. 19 C  
 If the airplane continues to fly on the magnetic heading as illustrated, what magnetic bearing FROM the station would be intercepted at a 30° angle?

**OPCION A:** 090°.  
**OPCION B:** 270°.  
**OPCION C:** 310°.

PREG20080520 Ref. Fig. 19 C  
 If the airplane continues to fly on the magnetic heading as illustrated, what magnetic bearing FROM the station would be intercepted at a 35° angle?

**OPCION A:** 090°.  
**OPCION B:** 270°.  
**OPCION C:** 305°.

PREG20080536 While maintaining a constant heading, the ADF needle increases from a relative bearing of 45° to 090° in 5 minutes. The time to the station being used is A

**OPCION A:** 5 minutes.  
**OPCION B:** 10 minutes.  
**OPCION C:** 15 minutes.

PREG20080527 The ADF is tuned to a nondirectional radiobeacon and the relative bearing changes from 270° to 265° in 2.5 minutes of elapsed time. The time en route to that beacon would be C

**OPCION A:** 9 minutes.  
**OPCION B:** 18 minutes.  
**OPCION C:** 30 minutes.

PREG20080537 While cruising at 135 knots and on a constant heading, the ADF needle decreases from a relative bearing of 315° to 270° in 7 minutes. The approximate time and distance to the station being used is A

**OPCION A:** 7 minutes and 16 miles.  
**OPCION B:** 14 minutes. and 28 miles.  
**OPCION C:** 19 minutes and 38 miles.

PREG20080554 Inbound on the 190 radial, a pilot selects the 195 radial, turns 5° to the left, and notes the time. While maintaining a constant heading, the pilot notes the time for the CDI to center is 10 minutes. Based on this information, the ETE to the station is A

**OPCION A:** 10 minutes.

---

**OPCION B:** 15 minutes.

**OPCION C:** 20 minutes.

---

PREG20080539 When checking the course sensitivity of a VOR receiver, how many degrees should the OBS be rotated to move the CDI from the center to the last dot on either side? B

**OPCION A:** 5° to 10°.

**OPCION B:** 10° to 12°.

**OPCION C:** 18° to 20°.

---

PREG20080557 When the CDI needle is centered during an airborne VOR check, the omnibearing selector and the TO/FROM indicator should read B

**OPCION A:** within 4° of the selected radial.

**OPCION B:** within 6° of the selected radial.

**OPCION C:** 0° TO, only if you are due south of the VOR.

---

PREG20080556 When using VOT to make a VOR receiver check, the CDI should be centered and the OBS should indicate that the aircraft is on the C

**OPCION A:** 090 radial.

**OPCION B:** 180 radial.

**OPCION C:** 360 radial.

---

PREG20080555 How should the pilot make a VOR receiver check when the aircraft is located on the designated checkpoint on the airport surface? B

**OPCION A:** Set the OBS on 180° plus or minus 4°; the CDI should center with a FROM indication.

**OPCION B:** Set the OBS on the designated radial. The CDI must center within plus or minus 4° of that radial with a FROM indication.

**OPCION C:** With the aircraft headed directly toward the VOR and the OBS set to 000°, the CDI should center within plus or minus 4° of that radial with a TO indication.

---

PREG20080553 Inbound on the 315 radial, a pilot selects the 320 radial, turns 5° to the left, and notes the time. While maintaining a constant heading, the pilot notes the time for the CDI to center is 12 minutes. Based on this information, the ETE to the station is B

**OPCION A:** 10 minutes.

**OPCION B:** 12 minutes.

**OPCION C:** 24 minutes.

---

PREG20080552 Inbound on the 090 radial, a pilot rotates the OBS 010° to the left, turns 010° to the right, and notes the time. While maintaining a constant heading, the pilot determines that the elapsed time for the CDI to center is 8 minutes. Based on this information, the ETE to the station is A

**OPCION A:** 8 minutes.

**OPCION B:** 16 minutes.



**OPCION C:** 24 minutes.

PREG20080551 Inbound on the 040 radial, a pilot selects the 055 radial, turns 15° to the left, and notes the time. While maintaining a constant heading, the pilot notes the time for the CDI to center is 15 minutes. Based on this information, the ETE to the station is B

**OPCION A:** 8 minutes.

**OPCION B:** 15 minutes.

**OPCION C:** 30 minutes.

PREG20080550 Ref. Fig. 24 A  
If the time flown between aircraft positions 2 and 3 is 15 minutes, what is the estimated time to the station?

**OPCION A:** 15 minutes.

**OPCION B:** 30 minutes.

**OPCION C:** 60 minutes.

PREG20080549 Ref. Fig. 23 B  
If the time flown between aircraft positions 2 and 3 is 13 minutes, what is the estimated time to the station?

**OPCION A:** 7.8 minutes.

**OPCION B:** 13 minutes.

**OPCION C:** 26 minutes.

PREG20080548 Ref. Fig. 22 A  
If the time flown between aircraft positions 2 and 3 is 8 minutes, what is the estimated time to the station?

**OPCION A:** 8 minutes.

**OPCION B:** 16 minutes.

**OPCION C:** 48 minutes.

PREG20080547 Ref. Fig. 21 A  
If the time flown between aircraft positions 2 and 3 is 13 minutes, what is the estimated time to the station?

**OPCION A:** 13 minutes.

**OPCION B:** 17 minutes.

**OPCION C:** 26 minutes.

PREG20080546 While maintaining a magnetic heading of 270° and a true airspeed of 120 knots, the 360 radial of a VOR is crossed at 1237 and the 350 radial is crossed at 1244. The approximate time and distance to this station are A

**OPCION A:** 42 minutes and 84 NM.

**OPCION B:** 42 minutes and 91 NM.

**OPCION C:** 44 minutes and 96 NM.

---

PREG20080545	Ref. Fig. 20 Which instrument(s) show(s) that the aircraft is getting further from the selected VORTAC?	A
<b>OPCION A:</b>	4.	
<b>OPCION B:</b>	1 and 4.	
<b>OPCION C:</b>	2 and 3.	

---

PREG20080544	Ref. Fig. 20 Which instrument shows the aircraft to be northwest of the VORTAC?	B
<b>OPCION A:</b>	1.	
<b>OPCION B:</b>	2.	
<b>OPCION C:</b>	3.	

---

PREG20080543	Ref. Fig. 20 Which instrument shows the aircraft in a position where a straight course after a 90° left turn would result in the aircraft intercepting the 180 radial?	B
<b>OPCION A:</b>	2.	
<b>OPCION B:</b>	3.	
<b>OPCION C:</b>	4.	

---

PREG20080542	Ref. Fig. 20 Which instrument shows the aircraft in a position where a 180° turn would result in the aircraft intercepting the 150 radial at a 30° angle?	C
<b>OPCION A:</b>	2.	
<b>OPCION B:</b>	3.	
<b>OPCION C:</b>	4.	

---

PREG20080541	Ref. Fig. 20 Using instrument group 3, if the aircraft makes a 180° turn to the left and continues straight ahead, it will intercept which radial?	A
<b>OPCION A:</b>	135 radial.	
<b>OPCION B:</b>	270 radial.	
<b>OPCION C:</b>	360 radial.	

---

PREG20080540	An aircraft 60 miles from a VOR station has a CDI indication of one-fifth deflection, this represents a course centerline deviation of approximately	B
<b>OPCION A:</b>	6 miles.	
<b>OPCION B:</b>	2 miles.	
<b>OPCION C:</b>	1 mile.	

---

---

PREG20080538      While maintaining a constant heading, a relative bearing of  $10^\circ$  doubles in 5 minutes. If the true airspeed is 105 knots, the time and distance to the station being used is approximately A

**OPCION A:**      5 minutes and 8.7 miles.  
**OPCION B:**      10 minutes and 17 miles.  
**OPCION C:**      15 minutes and 31.2 miles.

---

PREG20080518      Ref. Fig. 18 B  
To intercept a magnetic bearing of  $240^\circ$  FROM at a  $30^\circ$  angle (while outbound), the airplane should be turned

**OPCION A:**      left  $065^\circ$ .  
**OPCION B:**      left  $125^\circ$ .  
**OPCION C:**      right  $270^\circ$ .

---

PREG20080489      If an airplane is consuming 12.5 gallons of fuel per hour at a cruising altitude of 8,500 feet and the groundspeed is 145 knots, how much fuel is required to travel 435 NM? C

**OPCION A:**      27 gallons.  
**OPCION B:**      34 gallons.  
**OPCION C:**      38 gallons.

---

PREG20080517      Ref. Fig. 17 C  
Which is true regarding illustration 4, if the present heading is maintained? The airplane will

**OPCION A:**      cross the 060 radial at a  $15^\circ$  angle.  
**OPCION B:**      intercept the 240 radial at a  $30^\circ$  angle.  
**OPCION C:**      cross the 180 radial at a  $75^\circ$  angle.

---

PREG20080495      You have flown 52 miles, are 6 miles off course, and have 118 miles yet to fly. To converge on your destination, the total correction angle would be C

**OPCION A:**       $3^\circ$ .  
**OPCION B:**       $6^\circ$ .  
**OPCION C:**       $10^\circ$ .

---

PREG20080496      GIVEN: C

Distance off course ..... 9 mi  
Distance flown ..... 95 mi  
Distance to fly ..... 125 mi

To converge at the destination, the total correction angle would be

**OPCION A:**       $4^\circ$ .  
**OPCION B:**       $6^\circ$ .  
**OPCION C:**       $10^\circ$ .

---

PREG20080485 An airplane descends to an airport under the following conditions: C

Cruising altitude ..... 7,500 ft  
Airport elevation ..... 1,300 ft  
Descends to ..... 800 ft AGL  
Rate of descent ..... 300 ft/min  
Average true airspeed ..... 120 kts  
True course ..... 165°  
Average wind velocity ..... 240° at 20 kts  
Variation ..... 4°E  
Deviation ..... -2°  
Average fuel consumption ..... 9.6 gal/hr

Determine the approximate time, compass heading, distance, and fuel consumed during the descent.

- OPCION A:** 16 minutes, 168°, 30 NM, 2.9 gallons.
- OPCION B:** 18 minutes, 164°, 34 NM, 3.2 gallons.
- OPCION C:** 18 minutes, 168°, 34 NM, 2.9 gallons.

PREG20080498 GIVEN: C

Wind ..... 175° at 20 kts  
Distance ..... 135 NM  
True course ..... 075°  
True airspeed ..... 80 kts  
Fuel consumption ..... 105 lb/hr

Determine the time en route and fuel consumption.

- OPCION A:** 1 hour 28 minutes and 73.2 pounds.
- OPCION B:** 1 hour 38 minutes and 158 pounds.
- OPCION C:** 1 hour 40 minutes and 175 pounds.

PREG20080515 Ref. Fig. 17 B

Which illustration indicates that the airplane will intercept the 060 radial at a 75° angle inbound, if the present heading is maintained?

- OPCION A:** 4.
- OPCION B:** 5.
- OPCION C:** 6.

PREG20080497 True course measurements on a Sectional Aeronautical Chart should be C  
made at a meridian near the midpoint of the course because the

- OPCION A:** values of isogonic lines change from point to point.
- OPCION B:** angles formed by isogonic lines and lines of latitude vary from point to point.
- OPCION C:** angles formed by lines of longitude and the course line vary from point to point.

---

PREG20080514	Ref. Fig. 17 Which statement is true regarding illustration 2, if the present heading is maintained? The airplane will	A
<b>OPCION A:</b>	cross the 180 radial at a 45° angle outbound.	
<b>OPCION B:</b>	intercept the 225 radial at a 45° angle.	
<b>OPCION C:</b>	intercept the 360 radial at a 45° angle inbound.	

---

PREG20080513	Ref Fig. 17 Which illustration indicates that the airplane will intercept the 060 radial at a 60° angle inbound, if the present heading is maintained?	A
<b>OPCION A:</b>	6.	
<b>OPCION B:</b>	4.	
<b>OPCION C:</b>	5.	

---

PREG20080512	To track inbound on the 215 radial of a VOR station, the recommended procedure is to set the OBS to	C
<b>OPCION A:</b>	215° and make heading corrections toward the CDI needle.	
<b>OPCION B:</b>	215° and make heading corrections away from the CDI needle.	
<b>OPCION C:</b>	035° and make heading corrections toward the CDI needle.	

---

PREG20080511	To track outbound on the 180 radial of a VOR station, the recommended procedure is to set the OBS to	C
<b>OPCION A:</b>	360° and make heading corrections toward the CDI needle.	
<b>OPCION B:</b>	180° and make heading corrections away from the CDI needle.	
<b>OPCION C:</b>	180° and make heading corrections toward the CDI needle.	

---

PREG20080509	Ref. Fig. 16 At the position indicated by instrument group 1, to intercept the 330° magnetic bearing to the NDB at a 30° angle, the aircraft should be turned	C
<b>OPCION A:</b>	left to a heading of 270°.	
<b>OPCION B:</b>	right to a heading of 330°.	
<b>OPCION C:</b>	right to a heading of 360°.	

---

PREG20080508	Ref. Fig. 16 At the position indicated by instrument group 1, what would be the relative bearing if the aircraft were turned to a magnetic heading of 090°?	C
<b>OPCION A:</b>	150°.	
<b>OPCION B:</b>	190°.	
<b>OPCION C:</b>	250°.	

---

PREG20080507	Ref. Fig. 16 If the aircraft continues its present heading as shown in instrument group 3, what will be the relative bearing when the aircraft reaches the magnetic bearing of 030° FROM the NDB?	C
--------------	--	---

- OPCION A:** 030°.
- OPCION B:** 060°.
- OPCION C:** 240°.

PREG20080510 Which situation would result in reverse sensing of a VOR receiver? A

- OPCION A:** Flying a heading that is reciprocal to the bearing selected on the OBS.
- OPCION B:** Setting the OBS to a bearing that is 90° from the bearing on which the aircraft is located.
- OPCION C:** Failing to change the OBS from the selected inbound course to the outbound course after passing the station.

PREG20080506 If the relative bearing to a nondirectional radiobeacon is 045° and the magnetic heading is 355°, the magnetic bearing TO that radiobeacon would be A

- OPCION A:** 040°.
- OPCION B:** 065°.
- OPCION C:** 220°.

PREG20080501 For night flying operations, the best night vision is achieved when the: B

- OPCION A:** pupils of the eyes have become dilated in approximately 10 minutes
- OPCION B:** rods in the eyes have become adjusted to the darkness in approximately 30 minutes
- OPCION C:** cones in the eyes have become adjusted to the darkness in approximately 5 minutes

PREG20080502 When operating VFR at night, what is the first indication of flying into restricted visibility conditions? A

- OPCION A:** A gradual disappearance of lights on the ground
- OPCION B:** Ground lights begin to take on an appearance of being surrounded by a halo or glow
- OPCION C:** Cockpit lights begin to take on an appearance of a halo or glow around them

PREG20080500 An airplane departs an airport under the following conditions: B

Airport elevation ..... 1,500 ft  
 Cruising altitude ..... 9,500 ft  
 Rate of climb ..... 500 ft/min  
 Average true airspeed ..... 160 kts  
 True course ..... 145°  
 Average wind velocity ..... 080° at 15 kts  
 Variation ..... 5°E  
 Deviation ..... -3°  
 Average fuel consumption ..... 14 gal/hr

Determine the approximate time, compass heading, distance, and fuel consumed during the climb.

- OPCION A:** 14 minutes, 128°, 35 NM, 3.2 gallons.  
**OPCION B:** 16 minutes, 132°, 41 NM, 3.7 gallons.  
**OPCION C:** 16 minutes, 128°, 32 NM, 3.8 gallons.

- PREG20080503 After experiencing a powerplant failure at night, one of the primary considerations should include: C
- OPCION A:** turning off all electrical switches to save battery power for landing  
**OPCION B:** Maneuvering to and landing on a lighted highway or road  
**OPCION C:** planning the emergency approach and landing to an unlighted portion of an area

- PREG20080504 When planning for an emergency landing at night on of the primary considerations should include C
- OPCION A:** landing without flaps to ensure a nose - high landing attitude at touchdown  
**OPCION B:** turning off all the electrical switches to save battery power for the landing  
**OPCION C:** selecting a landing area close to public access, if possible

- PREG20080505 The ADF is tuned to a radiobeacon. If the magnetic heading is 040° and the relative bearing is 290°, the magnetic bearing TO that radiobeacon would be C
- OPCION A:** 150°.  
**OPCION B:** 285°.  
**OPCION C:** 330°.

- PREG20080499 An airplane departs an airport under the following conditions: B
- Airport elevation ..... 1,000 ft  
 Cruise altitude ..... 9,500 ft  
 Rate of climb ..... 500 ft/min  
 Average true airspeed ..... 135 kts  
 True course ..... 215°  
 Average wind velocity ..... 290° at 20 kts  
 Variation ..... 3°W  
 Deviation ..... -2°  
 Average fuel consumption ..... 13 gal/hr
- Determine the approximate time, compass heading, distance, and fuel consumed during the climb.
- OPCION A:** 14 minutes, 234°, 26 NM, 3.9 gallons.  
**OPCION B:** 17 minutes, 224°, 36 NM, 3.7 gallons.  
**OPCION C:** 17 minutes, 242°, 31 NM, 3.5 gallons.

