WHICH WAY TO STEER?

HIGH SCHOOLS
POWERED BY AOPA

CALCULATING THE COMPASS HEADING

OBJECTIVE

Demonstrate an understanding of the magnetic corrections to the true course necessary to determine a flyable compass heading.

TC +/– MV = MC

MC +/– DEV = CH

Sample Compass Deviation Card:

For (Magnetic)	N	30	60	E	120	150
Steer (Compass)	0	28	57	86	117	148
For (Magnetic	S	210	240	W	300	330
Steer (Compass)	180	212	243	274	303	332

Editorial credit: Pilot's Handbook of Aeronautical Knowledge

QUESTIONS

Use the equations above and the compass deviation card for all the questions below. *These scenarios assume no wind.*

Determine the compass heading in each of the following examples:

1. True course determined from Sectional: **270 degrees**

    a. Magnetic variation: **5 degrees East**
    b. Compass deviation: *+4 degrees*
    c. Compass heading: *269 degrees*

2. Reference the excerpt to the right.
   Course plotted on sectional: **175 degrees**

   a. Magnetic variation: *-21 degrees*
   b. Compass deviation: *-2 degrees*
   c. Compass heading: *152 degrees*
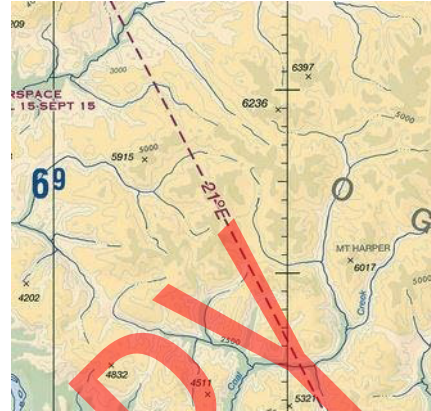
Editorial credit: SkyVector

3. Reference the excerpt above.
   Course plotted on sectional: *160 degrees*

   a. Magnetic variation: *0 degrees*
   b. Compass deviation: *Either -1 or -2 degrees*
   c. Compass heading: *158 or 159 degrees*