

# Answers

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## Practice and Problem-Solving Exercises

6. 4 vertices:  $M, N, P, O$

6 edges:  $\overline{MN}, \overline{MP}, \overline{MO}, \overline{NP}, \overline{PO}, \overline{ON}$

4 faces:  $\triangle MNP, \triangle MPO, \triangle NPO, \triangle MNO$

7. 8 vertices:  $A, B, C, D, E, F, G, H$

12 edges:  $\overline{AB}, \overline{BC}, \overline{CD}, \overline{DA}, \overline{EF}, \overline{FG}, \overline{GH}, \overline{HE},$   
 $\overline{AE}, \overline{BF}, \overline{CG}, \overline{DH}$

6 faces: quadrilaterals  $ABCD, EFGH, ABFE,$   
 $BCGF, DCGH, ADHE$

8. 10 vertices:  $P, Q, R, S, T, U, V, W, X, Y$

15 edges:  $\overline{PQ}, \overline{QS}, \overline{ST}, \overline{TR}, \overline{RP}, \overline{UV}, \overline{VX}, \overline{XY},$   
 $\overline{YW}, \overline{WU}, \overline{PU}, \overline{QV}, \overline{SX}, \overline{TY}, \overline{RW}$

7 faces: quadrilaterals  $STYX, RTYW, QSXV,$   
 $PQVU, RWUP,$  and pentagons  
 $UVXYW$  and  $PQSTR$

9. 8

10. 12

11. 12

12. 8

13. 5

14. 9