

Test 11

1. C: 4 diagonals,
forming 5 triangles
2. A: 10 triangles
3. D: $(N-2)180^\circ \Rightarrow$
 $((11)-2)180^\circ = (9)180^\circ = 1,620^\circ$
4. A: pentagon
5. A: 360°
6. B: $(N-2)180^\circ \Rightarrow ((8)-2)180^\circ =$
 $(6)180^\circ = 1,080^\circ$ total
 $1,080^\circ \div 8 = 135^\circ$ per angle
7. E: The exterior angles of a
polygon always add up to 360° .
8. C: $(N-2)180^\circ \Rightarrow ((5)-2)180^\circ =$
 $(3)180^\circ = 540^\circ$ total
 $540^\circ \div 5 = 108^\circ$ per angle
 $m\angle b = 180^\circ - (36^\circ + 108^\circ) =$
 $180^\circ - 144^\circ = 36^\circ$
9. E: $(N-2)180^\circ \Rightarrow ((8)-2)180^\circ =$
 $(6)180^\circ = 1,080^\circ$ total
 $1,080^\circ \div 8 = 135^\circ$
 $m\angle a = 135^\circ \div 2 = 67.5^\circ$
10. B: $(N-2)180^\circ \Rightarrow$
 $((6)-2)180^\circ = (4)180^\circ = 720^\circ$
11. A: $360^\circ \div 6 = 60^\circ$
12. C: 720° for all interior angles
(from #10)
 $720^\circ \div 6 = 120^\circ$
 $120^\circ \div 2 = 60^\circ$
for each new angle
13. D: $m\angle QVR = 180^\circ - (30^\circ + 120^\circ) =$
 $180^\circ - 150^\circ = 30^\circ$
14. B: $m\angle RVU = m\angle QVU - m\angle QVR =$
 $120^\circ - 30^\circ = 90^\circ$
15. A: $m\angle TRU =$
 $m\angle SRQ \div 4 = 120^\circ \div 4 = 30^\circ$