

**SM2 12.2 answers**

1.  $x = 77.5^\circ$

2.  $x = 70^\circ$

3.  $x = 90^\circ$

4.  $x = 69^\circ$

5.  $x = 110^\circ$

6.  $x = 95^\circ$

7.  $x = 98^\circ, y = 102^\circ$

8.  $x = 110^\circ, y = 65^\circ$

9.  $x = 114^\circ, y = 66^\circ$

10.  $x = 25^\circ, y = 90^\circ$

11.  $x = 64^\circ, y = 90^\circ$

12.  $x = 90^\circ, y = 15^\circ$

13.  $mKJ = 64^\circ$

14.  $mMN = 120^\circ$

15.  $mLM = 64^\circ$

16.  $mMN = 122^\circ$

17.  $mYZ = 110^\circ$

18.  $mAB = 145^\circ$

19.  $x = 12$

20.  $x = 17$

21.  $x = 16$

22.  $x \approx 11.2$

23.  $x = 18.5$

24.  $x = 6.4$

25.  $\overline{AB}$  is tangent to the circle26.  $\overline{AB}$  is not tangent to the circle27.  $\overline{AB}$  is not tangent to the circle