Geometry
Section 6-4
Selected Answers.

8. $JQ = 11$

10. $x = 29\frac{1}{3}$

12. $x = 4$

$m\angle JKN + m\angle NMM = 90$ b/c all 4 angles of a rectangle measure 90° and angle sum theorem.

$2x^2 + 2 + 14x = 90$

get right side $= 0$

$2x^2 + 14x + 2 = 90$

$2x^2 + 14x - 88 = 0$

factor

GCF : 2

$2(x^2 + 7x - 44) = 0$

$-44 = 11 \cdot -4$ or $-11 \cdot 4$

$7 : 11 + -4$

$2(x-4)(x+11) = 0$

set factors $= 0$

$x - 4 = 0$ $\quad x + 11 = 0$

$\boxed{x = 4}$ $\quad x = -11$

not good for measures.

14. $m\angle 3 = 60°$

16. $m\angle 5 = 30°$

18. $m\angle 7 = 60°$

20. $m\angle 9 = 60°$