6-94. Reasoning can vary. See sample responses below.

a. $5x + 3 = 4x + 9$ because if lines are parallel, then alternate interior angles are equal, $x = 6°$.

b. $q = t$ because if lines are parallel, then corresponding angles are equal; $c + t = 180°$ because if lines are parallel, then same-side interior angles are supplementary; 66°

c. $180° - 88° = 92°$; $g + q = 180°$ because when lines are parallel, same-side interior angles are supplementary.

6-95. See below.

a. $y = \frac{6}{5}x - 3$

b. $y = -\frac{1}{4}x + 4.5$

c. $y = \frac{1}{3}x$

d. $y = 2$

6-96. See below.

a. $x \approx 8.1$

b.   Not enough information.

c. $x \approx 10.67$

6-97. See below.

a. $x = 15°$, Triangle Angle Sum

b. $k = 5$, Isosceles triangle

c. $t = 9°$ and $w = 131°$, parallel lines

d. $x \approx 49.94$, Triangle Angle Sum and isosceles triangle

6-98. See below.

a.   Lose $1.50

b.   Lose $12

6-99. B