5-17. See below.

    a. $\sin 22° = \frac{x}{17}$, $x \approx 6.37$

    b. $\tan 49° = \frac{7}{x}$, $x \approx 6.09$

    c. $\cos 60° = \frac{x}{6}$, $x = 3$

5-18. ≈ 26.92 feet

5-19. See below.

    a. G; $a_n = 100(\frac{1}{10})^{n-1} = 10^{3-n}$

    b. A; $a_n = 0 - 50(n - 1) = 50 - 50n$

5-20. Region A is $\frac{1}{4}$ of the circle. Since the spinners are independent, the probability of A and A is $\frac{1}{4} \cdot \frac{1}{4} = \frac{1}{16}$. In 80 games, we expect A and A to occur $\frac{1}{16}(80) = 5$ times.

5-21. See below.

    a. False (a 30°- 60°- 90° triangle is a counterexample)

    b. False (this is only true for rectangles and parallelograms)

    c. True

5-22. See below.

a. $6x^2 - x - 2$

b. $6x^3 - x^2 - 12x - 5$

c. $-3xy + 3y^2 + 8x - 8y$

d. $x^2 - 9y^2$

5-23. $\triangle ABC \sim \triangle EFD$ by SAS~