Review & Preview

5-26. Solve the following equations for the given variable, if possible. Remember to check your answers.

a. $6x^2 = 150$

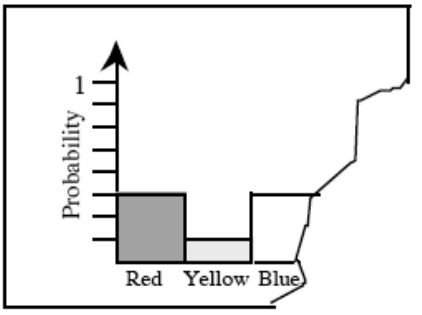
b. $4m + 3 - m = 3(m + 1)$

c. $\sqrt{5x - 1} = 3$

d. $(k - 4)^2 = -3$

5-27. Mervin and Leela are in bumper cars. They are at opposite ends of a 100 meter track heading toward each other. If Mervin moves at a rate of 5.5 meters per second and Leela moves at a rate of 3.2 meters per second, how long does it take for them to collide?

5-28. Donnell has a bar graph which shows the probability of a colored section coming up on a spinner, but part of the graph has been ripped off.



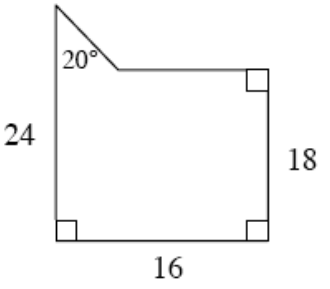
a. What is the probability of spinning red?

b. What is the probability of spinning yellow?

c. What is the probability of spinning blue?

d. If there is only one color missing from the graph, namely green, what is the probability of spinning green? Why?

5-29. Find the area and the perimeter of the figure at right. Be sure to organize your work so you can explain your method later.



5-30. While playing a board game, Mimi noticed that she could roll the dice 8 times in 30 seconds. How many minutes should it take her to roll the dice 150 times?