Name: Key

12.7 (day 1) Homework

1) What is the probability that you will roll a 5 on a toss of a six-sided number cube?

1/6

2) During a difficult release move, a gymnast has fallen from the parallel bars in 2 of the 12 competitions this season. The state meet is next week. What is the probability that she will successfully complete the release move?

10/12 or 5/6

Senior class members were asked to name their favorite subject. The results of the survey of 220 students are listed in the table below.

Subject	English	Social studies	Science	Math	Foreign language	Gym	No preference
Number	30	40	50	35	20	10	35

3) What is the probability that a student said science?

50/220 = 5/22

4) What is the probability that a student said English?

30/220 3/22

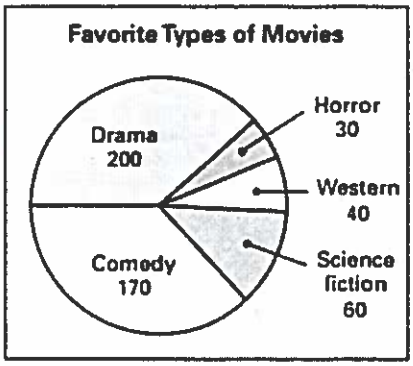
5) What is the probability that a student said math?

35/220 7/44

6) What is the probability that a student did not say math?

185/220 37/44

The local movie theater did a survey of students to determine what their favorite types of movies were. The results of the survey are shown in the circle graph at the right.



7) How many students were surveyed? 500

8) What is the probability that a student said comedy? 170/500 17/50

9) What is the probability that a student did not say horror?

480/500 47/50

What is the probability of choosing at random one of the following cards from a normal pack of 52 playing cards?

10) A black card 26/52 = 1/2

11) A face card (no ace) 12/52 = 3/13

12) An even numbered card 20/52 5/13

13) A 6 4/52 1/13

14) A 4 or a 5 8/52 = 2/13

15) A red jack 2/52 = 1/26

16) Not a 10 48/52 = 12/13

17) A red card and a king without replacement 26/52 · 4/51 = 2/51

18) P(black card, not a 6) with replacement 26/52 · 48/52 = 6/13

19) P(king, queen, jack) without replacement 4/52 · 4/51 · 4/50 = 12/325

20) P(not a diamond, face card) without replacement 39/52 · 12/51 = 3/17