SECONDARY MATH III
STATISTICS UNIT
WS 12.5 PROBABILITY

NAME_____
DATE_____
CLASS_____

Probability

Ahmed is posting 2 photographs on his website. He has narrowed his choices to 4 landscape photographs and 3 portraits. If he chooses the two photographs at random, find the probability of each selection.

1. P(2 portrait)

2. P(2 landscape)

3. P(1 of each)

The Carubas have a collection of 28 video movies, including 12 westerns and 16 science fiction. Elise selects 3 of the movies at random to bring to a sleep-over at her friend's house. Find the probability of each selection.

4. P(3 westerns)

5. P(3 science fiction)

6. P(1 western and 2 science fiction)

7. P(2 westerns and 1 science fiction)

8. P(3 comedy)

9. P(2 science fiction and 2 westerns)

For Exercises 10–13, use the chart that shows the class and gender statistics for the students taking an Algebra 1 or Algebra 2 class at La Mesa High School.

If a student taking Algebra 1 or Algebra 2 is selected at random, find each probability. Express as decimals rounded to the nearest thousandth.

Class/Gender	Number
Freshman/Male	95
Freshman/Female	101
Sophomore/Male	154
Sophomore/Female	145
Junior/Male	100
Junior/Female	102

10. P(sophomore/female)

11. P(junior/male)

12. P(freshman/male)

13. P(freshman/female)

Find the odds of an event occurring, given the probability of the event.

14. $\frac{5}{8}$

15. $\frac{2}{7}$

16. $\frac{3}{5}$

17. $\frac{1}{10}$

18. $\frac{5}{6}$

19. $\frac{5}{12}$

Find the probability of an event occurring, given the odds of the event.

20. 2:1

21. 8:9

22. 4:1

23. 1:9

24. 2:7

25. 5:9