Name _____ Date _____ Block ____

ALGEBRA **0-11a Practice**

Complete each of the following. SHOW WORK!!

Find each probability using the cards at the right.

R	E	D	G	R	E
E	N	B	L	U	E

1 P(E) **2** P(R) **3** P(G)

4 P(L) **5** P(L or D) **6** P(L or R) **7** P(vowel) **8** P(not R)

Box of erasers: 3 green, 6 yellow, 2 white, 3 red, 4 blue

9 P(green or blue) **10** P(yellow or red) **11** P(not green or white) **12** P(not red or blue)

Draw a diagram to find all the possible choices.

12 Breads at the bakery:
white, rye, wheat
regular size, mini-loaf

14 Lunch at a Chinese restaurant:
wonton soup or egg drop soup
fried rice, beef lo mein, chicken & broccoli
pineapple or mandarin oranges

Find the number of outcomes using the Fundamental Counting Principle.

15 Muffin choices:
apple, blueberry, bran
plain or streusel topping
with or without chopped nuts

16 Airline tickets:
7 airlines
3 prices
2 local airports
first-class, business-class, economy

17 T-shirt choices:
S, M, L, XL
8 colors
with or without pockets

18 Paint choices:
5 colors
water-based or oil-based
flat, semi-gloss, high-gloss

Solve each problem.

19 The beach excursion plane flies four times a day on Thurs, Fri, Sat, and Sun. Tickets may be purchased for one-way or round trip flights. How many travel options are available?

20 Margaret Bower went away for the weekend. In her suitcase she had a beige skirt, a white skirt, a brown blouse, a striped blouse, a brown belt, a white belt, a black belt, and tan shoes. How many different outfits could Margaret wear?

Name _____ Date _____ Block ____

ALGEBRA **0-11b Practice**

Complete each of the following. SHOW WORK!!

Find each odds using the cards at the right.

R	E	D	G	R	E

E	N	B	L	U	E

1 odds(E) **2** odds(R) **3** odds(G)

4 odds(L) **5** odds(L or D) **6** odds(L or R) **7** odds(vowel) **8** odds(not R)

Box of erasers: 3 green, 6 yellow, 2 white, 3 red, 4 blue

9 odds(green) **10** odds(yellow or red) **11** odds(not white) **12** odds(not red or blue)

Find the odds of each outcome if a computer randomly picks a letter in the name THE UNITED STATES OF AMERICA.

13 odds(A) **14** odds(T) **15** (vowel) **16** odds(not E)

Solve each situation.

17 If the odds of an event is $^{4}/_{7}$, what is the total # of possible outcomes?

18 If the probability of an event is $^{6}/_{25}$, what are the odds against the event?

NAME _____ DATE _____ PERIOD _____

Algebra 12-7a Practice

Probability of Compound Events

SHOW WORK!

A bag contains 2 green, 9 brown, 7 yellow, and 4 blue marbles. Once a marble is selected, it is replaced. Find each probability.

1. P(brown, then yellow)

2. P(green, then blue)

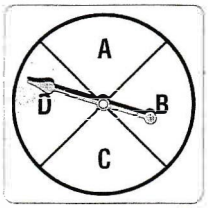
3. P(yellow, then yellow)

4. P(blue, then blue)

5. P(green, then *not* blue)

6. P(brown, then *not* green)

A die is rolled and a spinner like the one at the right is spun. Find each probability.



7. P(4, and A)

8. P(an even number, and C)

9. P(2 or 5, and B or D)

10. P(a number less than 5, and B, C, or D)

A card is being drawn from a standard deck of playing cards. After a card is selected, it is replaced. Find each probability.

11. P(jack , ten)

12. P(red , black)

13. P(queen , club)

14. P(red , ace)

15. P(diamond , black)

16. P(face card , spade)

Tiles numbered 1 through 20 are placed in a box. Tiles numbered 11 through 30 are placed in a second box. The first tile is randomly drawn from the first box. The second tile is randomly drawn from the second box. Find each probability.

17. P(both are greater than 15)

18. The first tile is odd and the second tile is less than 25.

19. The first tile is a multiple of 6 and the second tile is a multiple of 4.

20. The first tile is less than 15 and the second tile is even or greater than 25.

Lesson 12-7

Name _____ Date _____ Block ____

ALGEBRA **12-7b Practice**

A bag contains 2 green, 9 brown, 7 yellow, and 4 blue marbles. Once a marble is selected, it is not replaced. Find each probability. SHOW WORK!!

1 P(brown, then yellow)

2 P(green, then blue)

3 P(yellow, then yellow)

4 P(blue, then blue)

5 P(not green, then blue)

6 P(brown, then not green)

A card is chosen from a standard deck of playing cards. After a card is chosen, it is not replaced. Find each probability. SHOW WORK!!

7 P(J, 10)

8 P(red, then black)

9 P(Q, club)

10 P(red, then A)

11 P(diamond, black)

12 P(face card, spade)

13 P(red, not face card)

14 P(heart, not Q)

Tiles numbered 1 through 30 are placed in a box. The first tile is randomly drawn, not replaced, then the second tile is drawn. Find each probability.

15 P(odd, less than 25)

16 P(both greater than 15)

17 P(multiple of 6, multiple of 4)

18 P(less than 15, greater than 25)

19 P(greater than 9, multiple of 3)

20 P(both between 15 & 20)

Name _____ Date _____ Block ____

ALGEBRA **12-7c Practice**

A bag contains 2 green, 9 brown, 7 yellow, and 4 blue marbles. Find each probability. After a marble is selected, do not replace it. SHOW WORK!!

1 P(brown, then not blue)

2 P(green, then not red)

3 P(yellow, then not green)

4 P(green, then not brown)

5 P(not green, then not blue)

6 P(red, then not yellow)

A card is chosen from a standard deck of playing cards. Find each probability. SHOW WORK!!

7 P(red or face card)

8 P(red or 7)

9 P(Q or a heart)

10 P(red or A)

11 P(club or odd)

12 P(face card or spade)

13 P(red or not face card)

14 P(heart or not Q)

Tiles numbered 1 through 30 are placed in a box. Find the probability.

15 P(odd or less than 25)

16 P(multiple of 6 or multiple of 4)

17 P(less than 15 or greater than 25)

18 P(greater than 9 or multiple of 3)

Name_____ Date_____ Block___

Algebra **12-5 Practice**

The results of a survey of 100 randomly selected students at a 2000-student high school are below. Find the experimental probability that a student selected at random makes the given responce.

PLANS FOR AFTER GRADUATION

Responce	# of Respondents
Go to a community college	24
Go to a 4-year college	43
Take a year off, 1st	12
Go to trade school	15
Do not plan to go to college	6

① P(community college)

② P(4-year college)

③ P(trade school)

④ P(not trade school)

⑤ P(trade school or community college)

⑥ P(community or 4-year college)

A forest contains about 500 trees. You randomly pick 67 trees and find that 27 are oaks.

(7) What is the experimental probability that a tree in the forest is an oak?

(8) Predict how many oak trees there are in the forest.

Suppose 12 out of 30 families on your street have a cat or dog as a pet.

(9) What is the experimental probability that a randomly selected family in your neighborhood will have a cat or dog as a pet?

(10) Predict how many cat- or dog-owning families you can expect among 57 families in your neighborhood.