You may use a Calc. Unit 2 Ratios/Rates/Proportions On this worksheet. Express each ratio three different ways. Reduce your ratios if possible.



2) Diamonds to clubs:



3) Diamonds to all suits:

4) Spades to all suits:

5) Zach wants to find the ratio of his T-shirts to jeans. He has 14 t-shirts and 9 pairs of jeans. Describe and correct his error below:

$$\frac{T-shirts}{jeans} = \frac{9}{14}$$

6) Write the ratio in three different ways: For a fund raiser, the ratio of tickets you sold to tickets your friend sold was 11 to 5.

> Now tell if this means that you sold 11 raffle tickets and your friend sold 5. Explain your reasoning.

 $A_1B_1C^{7}$) Fill in the blank with <, >, or =

ACC

- a) 9:15 8:20
- b) 10:12 _____ 48:72
- c) 51:39 36:27
- d) 12:16 21:28

 A_1B_1C 8) Find the unit rate.

Acc

a) $\frac{12 L}{2 days}$

C, ACC 9) A recipe for rice pudding uses $\frac{1}{2}$ cup of rice and serves 6 people.

- a) Write the cups of rice per person as a unit rate.
- b) How many cups of rice do you need to serve 75 people?
- c) One cup of rice weighs 6.4 ounces. How many ounces of rice do you need to serve 75 people?
- d) A 1-pound box of rice costs \$.99. How much does the rice for 75 servings of rice pudding cost? Explain your reasoning.

A,B,C 10) Determine which is the better buy: (show your work, but you can use a calculator)

- a) 6 oz. can of tuna for \$1.25 or 9oz. can of tuna for \$1.99
- b) 16 oz. bottle of salad dressing for \$2.29 or 20 oz. bottle of salad dressing for \$2.89

A₁B₁C 11) Solve the proportion
Acc 15 r

a)
$$\frac{15}{20} = \frac{x}{4}$$

b)
$$\frac{4}{36} = \frac{w}{9}$$

c)
$$\frac{51}{z} = \frac{3}{2}$$

12) A recipe that makes 12 pints of salsa uses 35 tomatoes. Write a proportion that you can use determine the number of tomatoes needed to make 2 pints of salsa. Then solve your proportion.

- 13) Write and solve the proportion: $A_1B_1C_1$, a) 8 is to 3 as w is to 12 Acc b) p is to 30 as 10 is to 12 c) 36 is to 42 as d is to 28 d) 6 is to 16 as z is to 40 A A₁B₁C 14) The average person blinks about 360 times in 30 minutes. How many times does the average person blink in 9 minutes? (show your proportion) A₁B₁C₁15) The ratio of the number of Taylor's CDs to the number of Dave's CDs is 7 to 8. Taylor has 84 CDs. Together how many CDs do they have? 16) At a typical NFL game, the ratio of males to females in attendance is 3:2. There are 12,000 female spectators. What is the ratio of the number of male spectators to the total number of spectators? 17) Rob used 5 slices of bologna for every 3 slices of bread he used. How many slices of bread will he A,Bneed for 35 slices of bologna?
- 18) Farmer Joe has lots of rabbits and lots of predators on his farm. Only 3 out of every 10 rabbits live long enough to reproduce. At this rate, how many rabbits will there need to be in order for 27 of them to reproduce?

A₁B₁C 19) Bonnie's recipe calls for 4 cups of brown sugar for every 3 cups of good old granulated sugar. If she needs 24 cups of brown sugar, how much total sugar will she need?