**Study ID: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Type A PRE/POST**

1. Use the picture to answer the following questions.



1. What is the ratio of moons to stars?

1. Draw or write in numbers an equivalent ratio to the above picture.

Use the chart below to answer questions 2-3.

|  |  |
| --- | --- |
| Number of Hours Since Park Opening | Number of Guests at the Park |
| 2 | 100 |
| 3 | 150 |
| 5 | 250 |
| 7 |  |

1. Write a rule that describes the data in the chart.

1. Use the rule to find the number of guests at the park after 7 hours.

1. Which of the following is NOT equivalent to 32% ? Explain why.
   1. 8:25
   2. 6 to 24
   3. 32/100
   4. 50:16

1. In a package of star stickers there are 15 red stars, 25 gold stars and 10 green stars.

* 1. What is the ratio of red to gold stars (in simplest form) ?

* 1. What is the ratio of green stars to the total number of stars?

* 1. Set up proportions to show how many red, gold and green stars would there be in 6 packages of stickers? Show all of your work.

1. John can buy 3 books for $18. How many books could John buy for $54?

1. Allison can read 80 pages in 2 hours. How many hours will it take her to read 240 pages?

1. The ratio of pens to pencils is 2/7. If you counted 84 pencils, how many pens would you expect to find?

In questions 9-12 solve for X in the proportions. Show all of your work?

1. 4/5 = 32/x 10. 6/x = 42/49

X = \_\_\_\_\_\_\_ X = \_\_\_\_\_\_\_\_\_\_

11. 3/8 = x/40 12. x/9 = 8/36

X = \_\_\_\_\_\_\_\_ X = \_\_\_\_\_\_\_\_\_\_

1. Albert owns a bakery that specializes in chocolate chip cookies. He has very specific standards for his cookies. Albert personally checks the cookies before they are sold. This is the table he uses when checking cookies.

|  |  |
| --- | --- |
| Number of Cookies | Number of Chocolate Chips |
| 2 | 30 |
| 4 | 60 |
| 5 | 75 |
| 7 | 105 |

Which of the following equations can be used to find CC, the number of chocolate chips you can find on any number of C, cookies?

1. C = 28 + CC

1. C = 15 + CC

1. C = 15 x CC

1. C = 30 x CC

1. Complete the following chart:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Red Marbles | 2 | 4 |  | 8 | 10 |
| Blue Marbles |  | 6 | 9 |  | 15 |

1. Cheryl shed 32 tears when she cut 2 onions. How many tears should she expect to shed if she cut 6 onions? Show work and explain your answer.