

Activity 10: The Very Best (Fill-in all the blanks and solutions!)

Directions: Solve each proportion below and then replace the blank spaces below with the variable that matches each answer. The resulting message will be the answer to the riddle. Not all letters will be used to solve the riddle.

$$1. \frac{5}{6} = \frac{e}{36} \quad (e = 30)$$

$$6. \frac{3}{8} = \frac{27}{m} \quad m =$$

$$2. \frac{4}{8} = \frac{i}{27} \quad i =$$

$$7. \frac{L}{8.4} = \frac{3}{1.2} \quad L =$$

$$3. \frac{3}{26} = \frac{9}{y} \quad y =$$

$$8. \frac{9.3}{r} = \frac{.27}{.9} \quad r =$$

$$4. \frac{n}{7} = \frac{15}{9} \quad n =$$

$$9. \frac{1.7}{5.1} = \frac{.5}{v} \quad v =$$

$$5. \frac{4}{5} = \frac{s}{1.25} \quad s =$$

$$10. \frac{1.1}{3.3} = \frac{6.9}{w} \quad w =$$

Question: What is the name of the best receiver on the football team?

 e.

20.7

13.5

21

21

30

30

1.5

30

31

72

13.5

1

1



□ Solving Proportions

Proportions are two ratios set equal to each other. Therefore, they are equivalent fractions. To solve proportions, start with two ratios that are set equal to one another, with one of the ratios missing a numerator or denominator. Find a correct answer for that missing number which will make these ratios (fractions) equivalent. To find this number, cross multiply, and solve the resulting equation as seen below.

Example: $\frac{x}{3} = \frac{4}{6}$

Solution: Cross Multiply. $6x = 12$

Divide. $\frac{\div 6}{\div 6}$

Answer: $x = 2$ (therefore $\dots \frac{2}{3} = \frac{4}{6}$)