

Workout #25



1. _____ If Reggie Bush is offered 20 million dollars guaranteed for 10 years by the Saints, and the Cowboys offer him 30 million dollars guaranteed for 12 years, by what percentage is the Cowboy's offer better per year than the Saints?
2. _____ What is the sum of the smallest 25 positive odd numbers?
3. _____ What is the probability of Drew picking 3 red marbles in a row without replacement from a bag containing 4 red marbles, 5 blue marbles, and 10 gold marbles? Express your answer as a common fraction.
4. _____ Reggie Bush correctly finds the sum of all the scores that can't possibly be achieved in a football league where you can only score 8-point touchdowns and 5-point field goals (with no extra points or safeties). What is this sum?
5. _____ A circle is inscribed within a square. The square has a side length of 6cm, what is the sum of the number of centimeters in the circle's circumference and the number of square centimeters in its area? Express your answer in terms of pi.
6. _____ Reggie Bush is thinking about changing his jersey number. He wants it to be a composite odd number between 20 and 50, and he doesn't want the sum of the number's prime factors to be greater than or equal to the sum of its digits. What is the sum of all the numbers which satisfy these criteria?
7. _____ If Reggie Bush averaged 4.7 yards a carry, and had 573 carries in 2006, averaged 4.3 yards a carry and had 438 carries in 2007 and averaged 5.4 yards a carry and had 583 carries in 2008, how many rushing yards does Reggie Bush average on all 3 years? Round to the nearest tenth.
8. _____ Reggie's age is $\frac{3}{2}$ of Drew's and Drew's age is $\frac{3}{7}$ of Darren's. What is the smallest possible sum of Reggie, Drew, and Darren's ages?
9. _____ cm If the length of the side of a square in centimeters is the square root of 2, what is the length in centimeters of its diagonal?



10. _____ mph



With the current, Reggie can row 24 miles in 3 hours. Against the same current, he can row only $\frac{2}{3}$ of the distance in 4 hours. What is the rate of the current?