

RACE TRACK MATH (MA.B.1.2.2, MA.B.2.2.1, MA.B.3.2.1, MA.B.1.3.2, MA.B.2.3.1, MA.B.3.3.1)

Try these math problems based on life at the track.

1. If a jockey weighs in at 112 lbs. and the horse he rides weighs in at 1110 lbs., what percent of its weight does a horse carry?
2. At the Belmont race in 2003, the winner received 60% of the purse, the second place horse won 20%, third place took 11%, 4th place took 6% and 5th place managed to pocket 3%. The total purse was \$1,000,000. What dollar amounts did each place horse win?
3. Ten furlongs is equal to $1\frac{1}{4}$ of a mile. How many furlongs are in 3 miles? How many feet are in each furlong? How many yards are in $1\frac{1}{4}$ furlongs?
4. If Ben had bet \$2.00 on GoGo to win and he won at 7 to 1 odds, how much money did Ben win?
5. If a jockey earns 10% of winnings when his horse comes in first, what would GoGo's jockey win from a purse of \$377,482.00
6. If the track retains 3% of total bets for expenses and the total bet for the day was \$1,876,000, what did the track earn?
7. Seabiscuit had 89 starts, with 33 wins, 15 places, and 13 shows. What was his percentage of "finishes in the money?"
8. Charles Howard paid \$8,000 for Seabiscuit and the horse eventually won \$437,730 in racing purses. What was the percentage return on Howard's investment?
9. You bet \$2.00 each to win, place, and show on GoGo. The horse wins and pays \$7.60 to win, \$4.20 to place, \$3.60 to show. What are your total winnings?
10. After your winnings, you must deduct your admission \$8.00, your hot dog \$4.00, nachos \$4.75, and coke \$2.50. You also had losses of \$14.00. How did you do for the day?

RACE TRACK MATH ANSWERS

1. $112 \text{ divided by } 1110 = .101 = 10.1\%$
2. 1st \$600,000 2nd 200,000 3rd 110,000 4th 60,000 5th 30,000
3. 3 miles = 24 furlongs 1 furlong = 5280 divided by 8 = 660 ft.
 $1\frac{1}{4}$ furlongs = 1760 divided by 8 = 220 yard/furlong $220 \times 1\frac{1}{4} = 275$ yards
4. Pays \$16.00 $\$16 - \2 (original bet) = \$14.00 in winnings
5. $\$377,482 \times 10\%$ (.1) = \$3774.82
6. $\$1,876,000 \times 3\%$ (.03) = \$56,280
7. 61 total "in the money" starts divided by 89 total starts = 68.5%
8. $\$437,730 - \$8000 = \$429,730$ profit $\$429,730 \text{ divided by } 8000 = 53.72$ or 5372%
9. Win: $\$7.60 - \2.00 bet. Place $\$4.20 - \2.00 bet Show $\$3.60 - \2.00 bet
 $\$5.60 + \$2.20 + \$1.60 = \9.40
10. You lost a total of \$23.85