Brainteasers For All Ages

Puzzle numbers are not history, and they are not a map to the property.

1. Speed test surprise - Puzzle only, not a map: if a car drives 60 miles per hour along a 3-mile desert track, how long does the trip take? Answer: 3 ÷ 60 = 0.05 hours. 0.05 × 60 = 3 minutes.

2. Driveway walk - Puzzle only, not a map: a desert track is 3 miles long. How many steps is that if each step is 2.5 feet? Answer: 3 miles = 15,840 feet. 15,840 ÷ 2.5 = 6,336 steps.

3. Desert drop - It's 112°F at noon and drops 83 degrees by sunrise. What's the morning temperature? Answer: 112 - 83 = 29°F.

4. Animal arithmetic - Puzzle only, not a census of the ranch: Bonnie has 2 tortoises, 4 goats (3 pounds of feed a day each), and 6 chickens (1 pound a day). How many pounds of feed per day? Answer: (4 × 3) + (6 × 1) = 12 + 6 = 18 pounds a day. The tortoises are not in the feed total.

5. Driveway dimensions - Puzzle only, not a map: if a track is 3 miles long and 20 feet wide, how many square feet of surface is that? Answer: 3 miles = 15,840 feet. 15,840 × 20 = 316,800 square feet.

6. Evaporation equation - Puzzle only: a lake loses 1 inch of water a day in summer. If the surface is 1,000 square feet, how many gallons evaporate in 3 days? (1 inch = 0.0833 feet; 1 cubic foot = 7.48 gallons.) Answer: 1,000 × 0.0833 × 3 = 249.9 cubic feet. 249.9 × 7.48 ~ 1,869 gallons.

7. Route 66 run - Driving 26 miles from Barstow to Newberry Springs at 52 mph, how long does the trip take? Answer: 26 ÷ 52 = 0.5 hours, which is 30 minutes. (The 26 miles is a puzzle distance, not a measured claim.)

8. House footprint - Puzzle only: if a house is 24 feet by 36 feet, what's the floor area? Answer: 24 × 36 = 864 square feet. This size is a puzzle number, not a measured floor plan.

9. Tortoise trek - Puzzle only: if a tortoise moves 0.2 miles per hour, how long would it take to walk a 3-mile track? Answer: 3 ÷ 0.2 = 15 hours.

10. Asphalt volume - Puzzle only: if a track was paved 2 inches thick across 316,800 square feet, how many cubic feet of asphalt were used? (The puzzle uses 2 inches = 0.167 feet.) Answer: 316,800 × 0.167 = 52,905.6 cubic feet.

11. Bitumen weight - If one cubic foot of asphalt weighs about 145 pounds, how many tons is 52,905.6 cubic feet? (1 ton = 2,000 pounds.) Answer: 52,905.6 × 145 = 7,671,312 pounds. Divided by 2,000 = 3,835.7 tons.

12. Desert echo - If sound travels 1,125 feet per second in dry air, how long would a shout take to travel 3 miles? Answer: 3 miles = 15,840 feet. 15,840 ÷ 1,125 = 14.08 seconds.

13. Island area - Puzzle only: a round island is 12 feet across. What's the surface area? Use pi ~ 3.14. Answer: Radius = 6 feet. pi × r^2 = 3.14 × 36 = 113.04 square feet.

14. Extra road - Puzzle only, not a map of I-40: if a detour added 1.5 miles of road on each of two sides, how much extra road is that? Answer: 1.5 × 2 = 3 miles.

15. Shade space - A pen is 8 feet by 12 feet. If there are 2 pens, how many square feet of shelter is that? Answer: 8 × 12 × 2 = 192 square feet.

16. Water tank math - A tank holds 250 gallons and water leaves it at 1 gallon a day. How many days before it runs dry? Answer: 250 ÷ 1 = 250 days. An older version of this puzzle divided by 6 and got 41.7 days. That figure assumed six drinkers. At 1 gallon a day, the tank lasts 250 days.

17. At 30 mph - Puzzle only, not a map: how long does it take to drive a 3-mile track at 30 miles per hour? Answer: 3 ÷ 30 = 0.1 hours. × 60 = 6 minutes.

18. Car fuel challenge - Puzzle only: if a car burns fuel at 4 miles per gallon, how much fuel is used to drive a 3-mile track down and back (6 miles)? Answer: 6 ÷ 4 = 1.5 gallons.

19. Mojave freeze - If a water trough freezes at 32°F and the temperature drops from 75°F by 3.5°F per hour, how many hours until it freezes? Answer: 75 - 32 = 43. 43 ÷ 3.5 ~ 12.3 hours.

20. Steps to town - Puzzle only: if a walk is 5.2 miles and you walk at 3 mph, how long does it take? Answer: 5.2 ÷ 3 ~ 1.73 hours, about 1 hour and 44 minutes. The 5.2 miles is a puzzle distance.