Grade 6

1. Solve the equation: $|x - 3| = 5$ (Options: Only 8, Only -2, 8 and -2)
2. The circumference is 12π. What is the area of this circle? (Options: 36π, 72π, 144π)
3. A map has a scale of 1:50000. What is the actual distance if it is 4 cm on the map? (Options: 2 km, 20 km, 200 m)
4. Simplify: $(2a)^3 * a^{-2}$ (Options: 6a, 8a, $8a^5$)
5. What is the last digit of 2^{100}? (Options: 0, 2, 4, 6)
6. In triangle ABC, angle A = 40°, angle B = 60°. Find the exterior angle at vertex C. (Options: 80°, 100°, 120°)
7. Which is smaller: -1/2 or -1/3? (Options: -1/2, -1/3, Equal)
8. If a/b = 2/3 and b/c = 3/4, what is a/c? (Options: 2/4 (1/2), 6/12 (1/2), 8/9)
9. An alloy contains 10% copper. How much copper is in 50 kg of the alloy? (Options: 5 kg, 10 kg, 0.5 kg)