Grade 8

1. Simplify: $(\sqrt{5} - 1)(\sqrt{5} + 1)$ (Options: 4, 5, 6)
2. Solve the equation: $x^2 + 4x - 5 = 0$. Find the sum of the roots. (Options: -4, 4, -5)
3. The area of a rhombus is 40. One diagonal is 8. Find the second diagonal. (Options: 5, 10, 12)
4. Which of these is NOT a function graph? (Options: Line, Circle, Parabola)
5. Simplify: $(a^2)^3 / a^4$ (Options: a, a^2, a^3)
6. $\sin(30°) + \cos(60°)$? (Options: 1, $\sqrt{3}/2$, 0.5)
7. A circle is inscribed in a triangle. The distance from the center to a side is the... (Options: Median, Bisector, Radius)
8. In an arithmetic progression $a_1 = 3$, $d = 4$. Find a_5. (Options: 19, 23, 27)
9. Solve: $x^2 = 49$ (Options: 7, -7, 7 and -7)