

**Algebra Self-Assessment Answers**

1.  $(3 + 2)^2 = 5^2 = 25$

2.  $\frac{15}{6-1} = \frac{15}{5} = 3$

3.  $\frac{(2+2)^2}{8} = \frac{4^2}{8} = \frac{16}{8} = 2$

4.  $\frac{3}{5}(5) + \frac{2}{5}(10) = 3 + 4 = 7$

Use the following values for 5 - 8:  $x_1 = 2, x_2 = 3, x_3 = 5, x_4 = 6$

5.  $\sum x_i = 2 + 3 + 5 + 6 = 16$

6.  $\sum x_i^2 = 2^2 + 3^2 + 5^2 + 6^2 = 4 + 9 + 15 + 36 = 74$

7.  $\sum (x_i - 1) = (2 - 1) + (3 - 1) + (5 - 1) + (6 - 1) = 1 + 2 + 4 + 5 = 12$

8.  $(\sum x_i)^2 = (16)^2 = 256$

9.  $3! = 3 * 2 * 1 = 6$

10.  $\frac{5!}{3!(5-3)!} = \frac{5 * 4 * 3 * 2 * 1}{(3 * 2 * 1)(2 * 1)} = \frac{5 * 4}{2} = \frac{20}{2} = 10$