Algebraic Expressions

Multiple choice questions

1) The sum of $4a^2$ and $6a^2$ is
   a) $10a^2$
   b) $10a^4$
   c) $4a^4$
   d) $6a^4$

2) $3x^2y \times 5x^2y$ gives
   a) $15x^2y^2$
   b) $15x^4y^2$
   c) $15x^2y$
   d) $15xy^2$

3) $45x^3y^2 \div 15xy$ gives
   a) $3x^2y^2$
   b) $3x^2y$
   c) $3xy$
   d) $3x^3y^2$

4) $95x^2y - 90x^2y$
   a) $5x^4y^2$
   b) $5x^2y^2$
   c) $5x^2y$
   d) $5x^0y^0$

5) The result of $(7p^2 + 8q + 9r) + (3p^2 + 2q + r)$
   a) $10p^2 + 8q + 10r$
   b) $10p^2 + 6q + 9r$
   c) $10p^2 + 2q + r$
   d) $10(p^2 + q + r)$

6) $(3x^2 + 5x - 6) - (10x^2 - 5x - 8)$
   a) $7x^2 + 10x + 14$
   b) $7x^2 + 5x + 2$
   c) $-7x^2 + 10x + 2$
   d) $-7x^2 + 10x + 14$

7) $(x + 2)(x + 1)$
   a) $x^2 + 2x + 2$
   b) $x^2 + 3x + 2$
   c) $x^2 + 2x + 1$
   d) $x^2 + 2x + 3$

8) $(36x^2 - 25y^2) \div (6x - 5y)$ gives
   a) $6x - 5y$
   b) $(6x - 5y)^2$
   c) $6x + 5y$
   d) $(6x + 5y)^2$

9) The sides of a triangle are $x + 2$, $x + 5$ and $2x + 3$, its perimeter is
   a) $4x + 10$
   b) $4x + 5$
   c) $4x + 7$
   d) $4x + 2$

10) The each four sides of a square are $(x + 1)\ cm$, then its area is
   a) $4(x + 1)\ cm^2$
   b) $4(x + 1)^2\ cm^2$
   c) $(x + 1)^2\ cm^2$
   d) $(x + 1)\ cm^2$