

**Test 2 - Algebra 1B**

**Multiple Choice** Identify the choice that best completes the statement or answers the question.

- B 1. Find  $(3y + 4z)(3y - 4z)$ .  $9y^2 - 12yz + 12yz - 16z^2$   
 a.  $9y^2 - 24yz - 16z^2$  b.  $9y^2 - 16z^2$  c.  $9y^2 + 16z^2$  d.  $9y^2 - 24yz + 16z^2$
- D 2. Find  $(-2r^2 + s)^2$ .  $(s - 2r^2)(s - 2r^2) = s^2 - 2r^2s - 2r^2s + 4r^4$   
 a.  $4r^4 + s^2$  b.  $-4r^4 - 4r^2s + s^2$  c.  $-4r^4 + s^2$  d.  $4r^4 - 4r^2s + s^2$
- D 3. Find  $(3a - 2b)(3a + 2b)$ .  $9a^2 + 6ab - 6ab - 4b^2$   
 a.  $9a^2 - 12ab + 4b^2$  b.  $9a^2 + 4b^2$  c.  $9a^2 + 12ab + 4b^2$  d.  $9a^2 - 4b^2$
- C 4. Find  $(4a^2 + b)^2$ .  $(4a^2 + b)(4a^2 + b) = 16a^4 + 4a^2b + 4a^2b + b^2$   
 a.  $8a^4 + b^2$  b.  $16a^4 + 8a^2b + b^2$  c.  $4a^4 + 8a^2b + b^2$  d.  $16a^4 + b^2$
- D 5. Each side  $y$  of a square is increased by 5 units. Which expression represents the number of square units in the area of the new square?  
 a.  $y^2 + 25$  b.  $y^2 + 10y + 10$  c.  $2y + 10$  d.  $y^2 + 10y + 25$   $(y+5)(y+5) = y^2 + 5y + 5y + 25$
- D 6. Find  $(3y - 4)(2y^2 + y - 1)$ .  $6y^3 + 3y^2 - 3y - 8y^2 - 4y + 4$   
 a.  $6y^3 - 5y^2 + 7y + 4$  b.  $6y^3 - 6y^2 - 7y - 4$  c.  $6y^3 - 7y^2 - 7y + 4$  d.  $6y^3 - 5y^2 - 7y + 4$
- B 7. Find  $(x + 2)(x + 4)$ .  $x^2 + 4x + 2x + 8$   
 a.  $x^2 + 2x + 6$  b.  $x^2 + 6x + 8$  c.  $x^2 + 8$  d.  $x^2 + 2x + 8$
- A 8. Find  $(c - 5)(c - 7)$ .  $c^2 - 7c - 5c + 35$   
 a.  $c^2 - 12c + 35$  b.  $c^2 + 12c + 35$  c.  $c^2 - 12c - 35$  d.  $c^2 + 35$
- B 9. Find  $(2x - 5)(2x + 5)$ .  $4x^2 + 10x - 10x - 25$   
 a.  $4x^2 + 25$  b.  $4x^2 - 25$  c.  $4x$  d.  $4x^2 - 20x - 25$
- C 10. Find  $(3y - 1)^2$ .  $(3y - 1)(3y - 1) = 9y^2 - 3y - 3y + 1$   
 a.  $6y^2 - 6y + 1$  b.  $9y^2 - 6y - 1$  c.  $9y^2 - 6y + 1$  d.  $9y^2 - 3y + 1$
- D 11. Solve  $-4(5 - 2n) = 8(-6 - 5n)$ .  
 $-4(5 - 2n) = 8(-6 - 5n)$   
 $-20 + 8n = -48 - 40n$   
 $+40n \quad +40n$   
 $-20 + 48n = -48$   
 $+20 \quad +20$   
 $48n = -28$   
 $\frac{48n}{48} = \frac{-28}{48}$   
 $n = \frac{-28}{48} = \frac{-7}{12}$
- C 12. Find  $(2n - 3)(n + 4)$ .  
 $2n^2 + 8n - 3n - 12$   
 $2n^2 + 5n - 12$