

## Factoring DIFF OF SQUARES

- Which expression is equivalent to  $121 - x^2$ ?  
A.  $(x - 11)(x - 11)$                       B.  $(x + 11)(x - 11)$   
C.  $(11 - x)(11 + x)$                       D.  $(11 - x)(11 - x)$   
1. \_\_\_\_\_
- Factor:  $y^2 - 100$   
2. \_\_\_\_\_
- What are the factors of  $y^3 - 4y$ ?  
A.  $y(y - 2)(y - 2)$    B.  $y(y + 4)(y - 4)$    C.  $(y^2 + 1)(y - 4)$    D.  $y(y + 2)(y - 2)$   
3. \_\_\_\_\_
- Factor completely:  $2x^2 - 50$   
4. \_\_\_\_\_
- When the expressions  $x^2 - 9$  and  $x^2 - 5x + 6$  are factored, a common factor is  
A.  $x + 3$               B.  $x - 3$               C.  $x - 2$               D.  $x^2$   
5. \_\_\_\_\_
- Factor completely:  $2x^2 - 18$   
6. \_\_\_\_\_
- Expressed in factored form, the binomial  $4a^2 - 9b^2$  is equivalent to  
A.  $(2a - 3b)(2a - 3b)$                       B.  $(2a + 3b)(2a - 3b)$   
C.  $(4a - 3b)(a + 3b)$                       D.  $(2a - 9b)(2a + b)$   
7. \_\_\_\_\_
- Factor completely:  $3x^3y^2 - 147x$   
8. \_\_\_\_\_
- When factored completely,  $x^3 + 3x^2 - 4x - 12$  equals  
A.  $(x + 2)(x - 2)(x - 3)$                       B.  $(x + 2)(x - 2)(x + 3)$   
C.  $(x^2 - 4)(x + 3)$                       D.  $(x^2 - 4)(x - 3)$   
9. \_\_\_\_\_

1.  
Answer:      C
2.  
Answer:       $(y + 10)(y - 10)$
3.  
Answer:      D
4.  
Answer:       $2(x + 5)(x - 5)$
5.  
Answer:      B
6.  
Answer:       $2(x + 3)(x - 3)$
7.  
Answer:      B
8.  
Answer:       $3x(xy + 7)(xy - 7)$
9.  
Answer:      B