

### Factoring TRINOMIAL

1. Factor:  $x^2 + 5x - 24$  1. \_\_\_\_\_
  
2. The expression  $3x^2 - 7x + 2$  is equivalent to 2. \_\_\_\_\_  
A.  $(3x + 2)(x + 1)$  B.  $(3x + 1)(x + 2)$  C.  $(3x - 2)(x - 1)$  D.  $(3x - 1)(x - 2)$
  
3. Factor:  $x^2 - 6x - 7$  3. \_\_\_\_\_
  
4. Express  $2x^2 - x - 3$  as the product of two binomials. 4. \_\_\_\_\_
  
5. Factor:  $x^2 - 5x + 6$  5. \_\_\_\_\_
  
6. Factor:  $x^2 + 6x + 8$  6. \_\_\_\_\_
  
7. Factored completely, the expression  $3x^3 - 33x^2 + 90x$  is equivalent to 7. \_\_\_\_\_  
A.  $3x(x^2 - 33x + 90)$  B.  $3x(x^2 - 11x + 30)$   
C.  $3x(x + 5)(x + 6)$  D.  $3x(x - 5)(x - 6)$
  
8. Factor:  $2x^2 - 5x + 2$  8. \_\_\_\_\_
  
9. Factor:  $x^2 + 3x - 28$  9. \_\_\_\_\_
  
10. Factor completely:  $3t^3 + 5t^2 - 12t$  10. \_\_\_\_\_
  
11. Factor completely:  $3x^2 - 15x - 42$  11. \_\_\_\_\_
  
12. Which expression is factored form  $2x^2 - 2x - 12$ ? 12. \_\_\_\_\_  
A.  $2(x + 2)(x - 3)$  B.  $2(x + 6)(x - 1)$  C.  $2(x + 3)(x - 2)$  D.  $2(x + 1)(x - 6)$
  
13. Factor completely:  $3x^2 + 15x - 42$  13. \_\_\_\_\_

1.  
Answer:  $(x + 8)(x - 3)$
2.  
Answer: D
3.  
Answer:  $(x - 7)(x + 1)$
4.  
Answer:  $(2x - 3)(x + 1)$
5.  
Answer:  $(x - 3)(x - 2)$
6.  
Answer:  $(x + 4)(x + 2)$
7.  
Answer: D
8.  
Answer:  $(2x - 1)(x - 2)$
9.  
Answer:  $(x - 4)(x + 7)$
10.  
Answer:  $t(3t - 4)(t + 3)$
11.  
Answer:  $3(x + 2)(x - 7)$
12.  
Answer: A
13.  
Answer:  $3(x + 7)(x - 2)$