

Algebra 2
Practice Quiz 5.4

NAME

KEY

Factor. None of the following are prime. (2 Points)

1. $a^2 + 12a + 27$

$(a+3)(a+9)$

2. $b^2 - 64$

$(b+8)(b-8)$

3. $2c^2 - 9c + 10$

$\frac{2c^2}{-4c} \quad \frac{2c^2}{-5c} \quad \begin{matrix} 20 \\ \wedge \\ -4-5 \end{matrix}$

$(c-2)(2c-5)$

1. _____

2. _____

3. _____

4. $d^3 + 125$

$(d+5)(d^2 - 5d + 25)$

5. $4e^2 - 20e + 25$

$4(e^2 - 5e + 14)$

6. $f^2 - 14f + 49$

$(f-7)(f-7)$

$(f-7)^2$

4. _____

5. _____

6. _____

7. $8g^2 + 6g + 20g + 15$

$2g(4g+3) + 5(4g+3)$

$(2g+5)(4g+3)$

8. $3h^2 - 3h - 36$

$3(h^2 - h - 12)$

$3(h+3)(h-4)$

9. $j^2 - 81$

$(j+9)(j-9)$

7. _____

8. _____

9. _____

10. _____

10. $k^2 + 10k - 24$

$(k+12)(k-2)$

11. $m^2 + 21m + 20$

$(m+1)(m+20)$

12. $3n^2 - 11n - 20$

$\frac{3n^2}{4n} \quad \frac{3n^2}{-15n}$

$\begin{matrix} 60 \\ \wedge \\ +4-15 \end{matrix}$

$(3n+4)(n-5)$

11. _____

12. _____