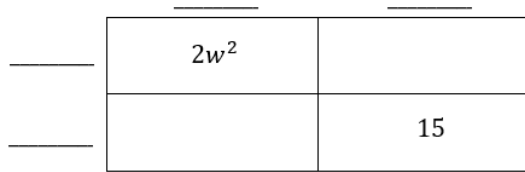


Math 2 Unit 9 Worksheet 5
Factoring Polynomials

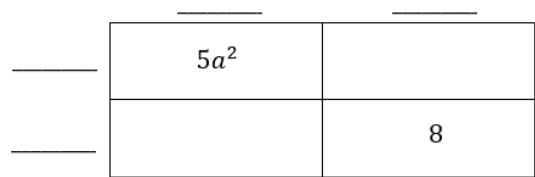
Name: _____
 Date: _____ Per: _____

[1-4] Factor using the Area Model.

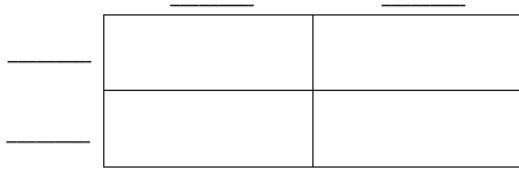
1. $2w^2 + 13w + 15 =$ _____



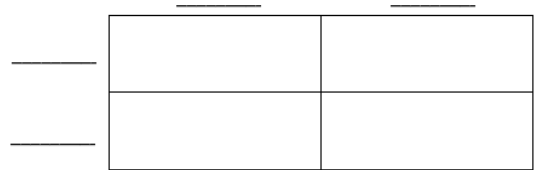
2. $5a^2 - 22a + 8 =$ _____



3. $5y^2 - 17y + 14 =$ _____



4. $3n^2 - 14n + 15 =$ _____



[5-8] a) Factor each expression.
 b) Check your answer by multiplying.

5. a) $2x^2 + 3x - 27$ b)

6. a) $t^2 + 9n + 18$ b)

7. a) $7y^2 + 29y - 30$ b)

8. a) $d^2 + 2d - 15$ b)

[9-18] Factor each expression.

9. $2m^2 + m - 21$

10. $n^2 - 6n - 40$

11. $4b^2 - b - 5$

12. $r^2 - 12r + 27$

13. $6x^2 + 19x - 36$

14. $v^2 - 5v - 36$

15. $7n^2 + 29n - 30$

16. $9b^2 - 65b + 14$

17. $3p^2 + 16p + 21$

18. $3v^2 - 28v - 20$

[19-24] Factor completely.

19. $25x^2 - 35x - 30$

20. $15n^2 - 117n - 24$

21. $10p^2 + 26p + 16$

22. $15k^2 - 80k + 100$

23. $50x^2 - 8$

24. $3m^3 - 27m$

[25-27] Review: Simplify.

25. $(6a^2q)(-4a^2q^4)$

26. $4xy^2(2x^4)^3$

27. $\frac{(4a^4q^{-3})^{-2}}{(2a^{-3}q^4)^3}$