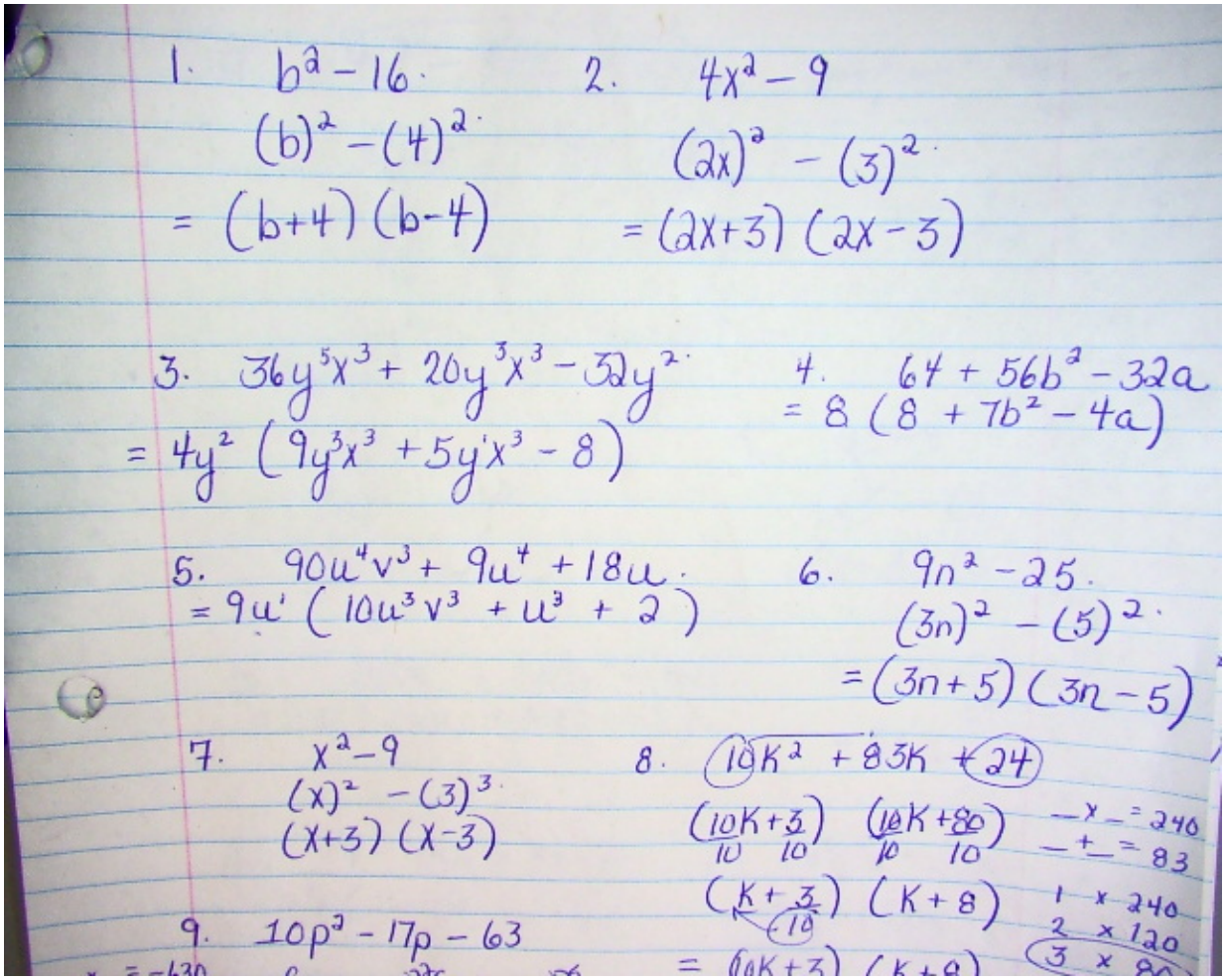


1. $b^2 - 16$
$(b)^2 - (4)^2$
$= (b+4)(b-4)$

2. $4x^2 - 9$
$(2x)^2 - (3)^2$
$= (2x+3)(2x-3)$

3. $36y^5x^3 + 20y^3x^3 - 32y^2$
$= 4y^2(9y^3x^3 + 5y^1x^3 - 8)$

4. $64 + 56b^2 - 32a$
$= 8(8 + 7b^2 - 4a)$

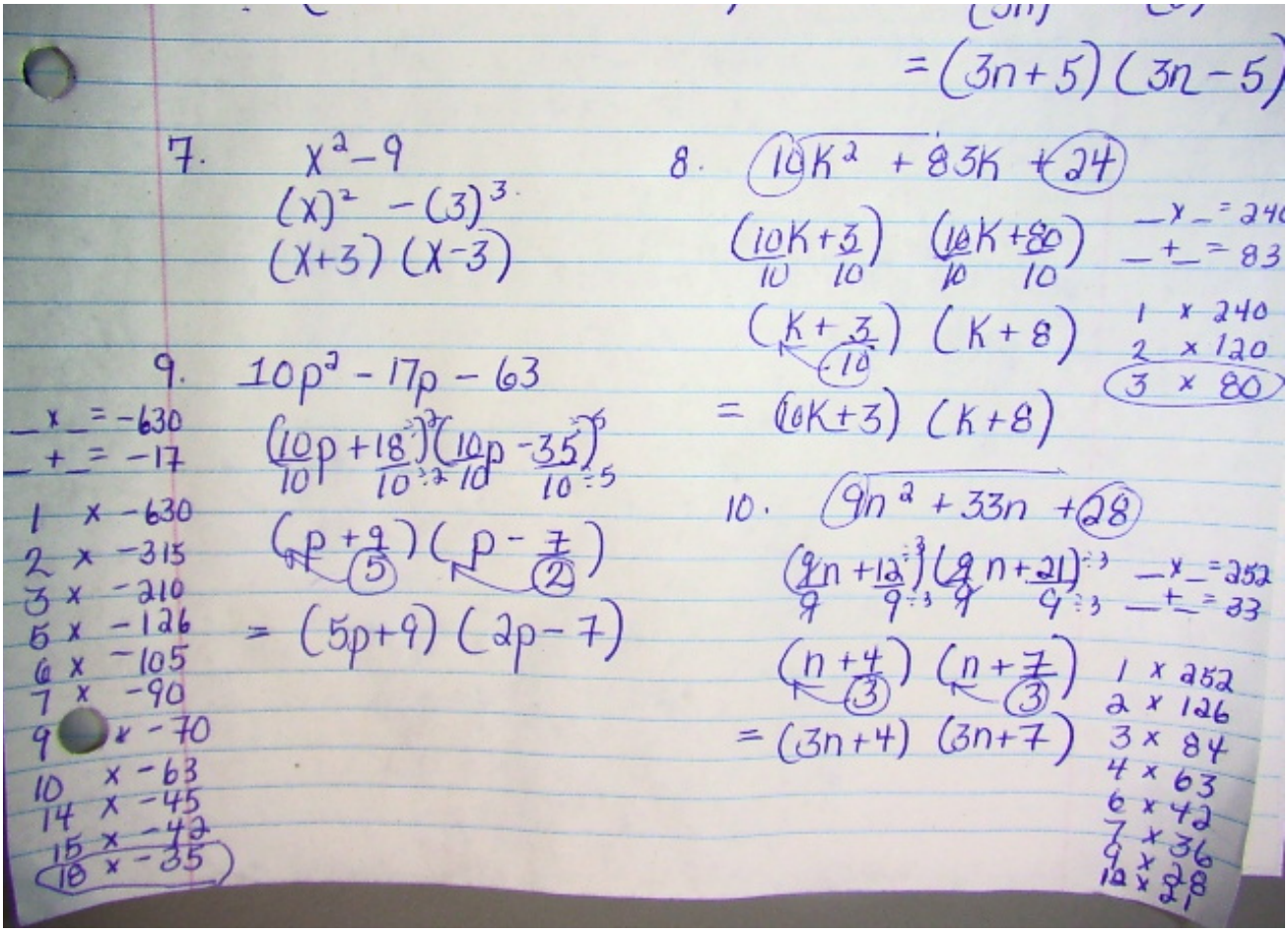
5. $90u^4v^3 + 9u^4 + 18u$
$= 9u^1(10u^3v^3 + u^3 + 2)$

6. $9n^2 - 25$
$(3n)^2 - (5)^2$
$= (3n+5)(3n-5)$

7. $x^2 - 9$
$(x)^2 - (3)^3$
$(x+3)(x-3)$

8. $10K^2 + 83K + 24$
$\frac{(10K+3)}{10}\ \frac{(10K+80)}{10}$
$(K + \frac{3}{10})(K+8)$
$= (10K+3)(K+8)$
$-x- = 240$
$-+- = 83$
1×240
2×120
3×80

9. $10p^2 - 17p - 63$



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

7. $x^2 - 9$

$(x)^2 - (3)^3$

$(x+3)(x-3)$

8. $10k^2 + 83k + 24$

$\frac{10k+3}{10} \quad \frac{10k+80}{10}$

$(k + \frac{3}{10})(k+8)$

$= (10k+3)(k+8)$

$\_ x \_ = 240$

$\_ + \_ = 83$

1×240

2×120

3×80

9. $10p^2 - 17p - 63$

$\frac{10p+18}{10} \quad \frac{10p-35}{10}$

$(p + \frac{9}{5})(p - \frac{7}{2})$

$= (5p+9)(2p-7)$

$\_ x \_ = -630$

$\_ + \_ = -17$

1×-630

2×-315

3×-210

5×-126

6×-105

7×-90

9×-70

10×-63

14×-45

15×-42

18×-35

10. $9n^2 + 33n + 28$

$\frac{9n+12}{9} \quad \frac{9n+21}{9}$

$(n + \frac{4}{3})(n + \frac{7}{3})$

$= (3n+4)(3n+7)$

$\_ x \_ = 252$

$\_ + \_ = 33$

1×252

2×126

3×84

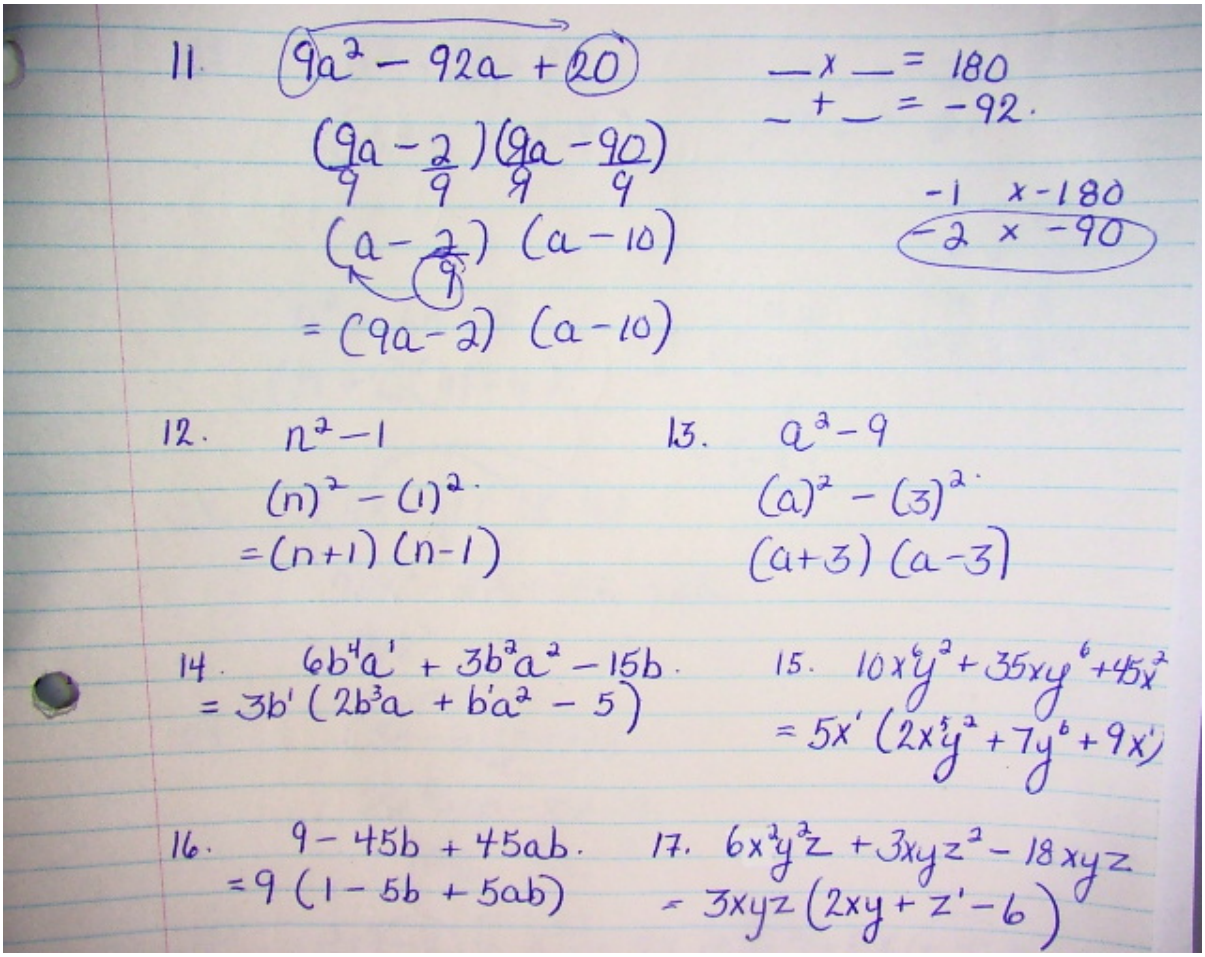
4×63

6×42

7×36

9×28

12×21



11. $9a^2 - 92a + 20$

$\_ \times \_ = 180$

$\_ + \_ = -92$.

-1×-180

-2×-90

$\left(\frac{9a}{9} - \frac{2}{9}\right)\left(\frac{9a}{9} - \frac{90}{9}\right)$

$(a - \frac{2}{9})(a - 10)$

$= (9a - 2)(a - 10)$

12. $n^2 - 1$

$(n)^2 - (1)^2$.

$= (n+1)(n-1)$

13. $a^2 - 9$

$(a)^2 - (3)^2$.

$(a+3)(a-3)$

14. $6b^4a^1 + 3b^2a^2 - 15b$.

$= 3b^1(2b^3a + b^1a^2 - 5)$

15. $10x^4y^2 + 35xy^6 + 45x^2$

$= 5x^1(2x^3y^2 + 7y^6 + 9x^1)$

16. $9 - 45b + 45ab$.

$= 9(1 - 5b + 5ab)$

17. $6x^2y^2z + 3xyz^2 - 18xyz$

$= 3xyz(2xy + z^1 - 6)$

$= 3b^1(2b^3a + b^1a^2 - 5)$

$= 5x^1(2x^5y^2 + 7y^6 + 9x^1)$

16. $9 - 45b + 45ab$.
$= 9(1 - 5b + 5ab)$

17. $6x^2y^2z + 3xyz^2 - 18xyz$
$= 3xyz(2xy + z^1 - 6)$

18. $63q^6p^5r^2 + 21q^5p^4 + 28q^3$.
$= 7q^3(9q^3p^5r^2 + 3q^2p^4 + 4)$

19. $K^2 - 16$.
$(K)^2 - (4)^2$.
$= (K+4)(K-4)$

20. $4p^2 + 12p + 9$

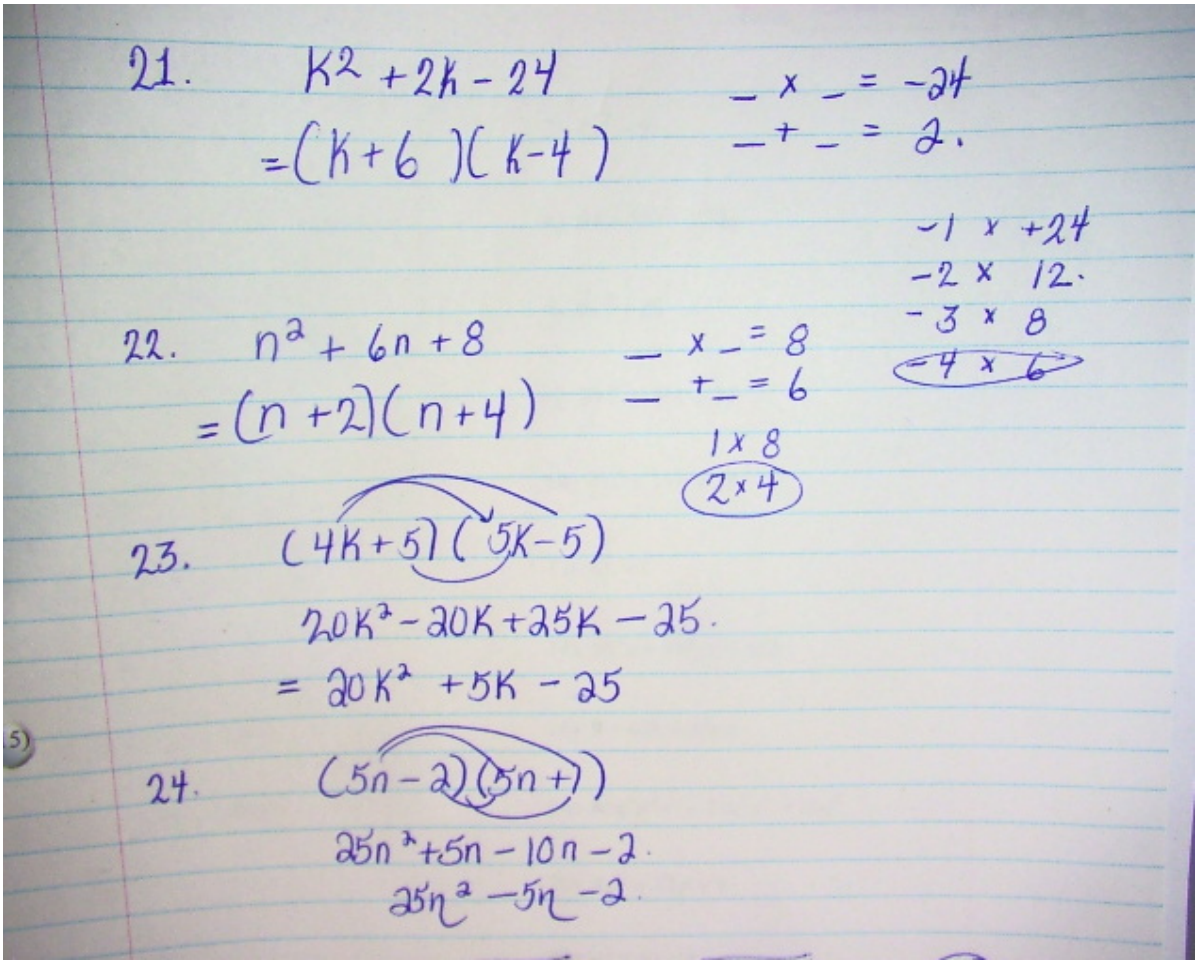
$\_ \times \_ = 36$
$\_ + \_ = 12$.

1×36
2×18
3×12
4×9
6×6

$\left(\frac{4}{4}p + \frac{6}{4}\right)\left(\frac{4}{4}p + \frac{6}{4}\right)$

$\left(p + \frac{3}{2}\right)\left(p + \frac{3}{2}\right)$

$(2p+3)(2p+3)$



21. $K^2 + 2K - 24$

$= (K+6)(K-4)$

$\_ \times \_ = -24$

$\_ + \_ = 2.$

$-1 \times +24$

$-2 \times 12.$

-3×8

-4×6

22. $n^2 + 6n + 8$

$= (n+2)(n+4)$

$\_ \times \_ = 8$

$\_ + \_ = 6$

1×8

2×4

23. $(4K+5)(5K-5)$

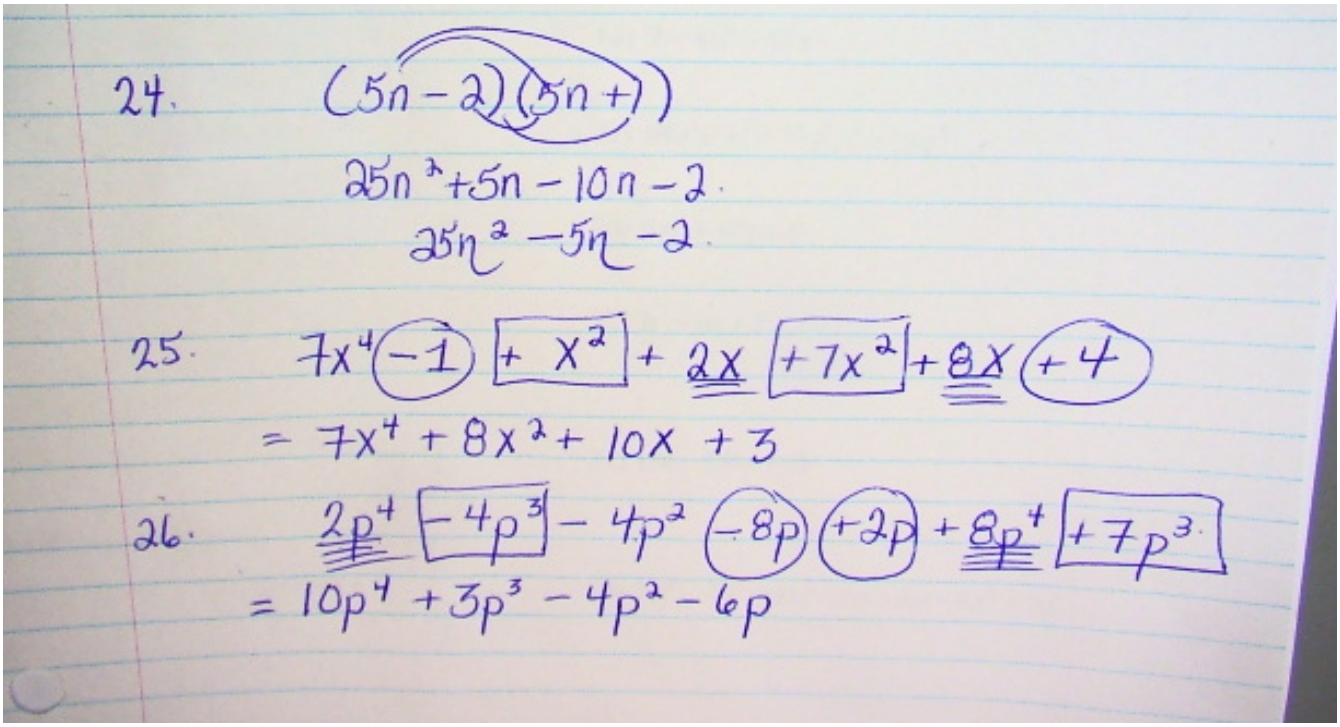
$20K^2 - 20K + 25K - 25.$

$= 20K^2 + 5K - 25$

24. $(5n-2)(5n+1)$

$25n^2 + 5n - 10n - 2.$

$25n^2 - 5n - 2.$



24. $(5n-2)(5n+1)$

$25n^2+5n-10n-2$

$25n^2-5n-2$

25. $7x^4(-1)[+x^2]+2x[+7x^2]+8x(+4)$

$= 7x^4+8x^2+10x+3$

26. $2p^4[-4p^3]-4p^2(-8p)(+2p)+8p^4[+7p^3]$

$= 10p^4+3p^3-4p^2-6p$