

Factoring

 Factor the common factor out of each expression.


1) $25x^2 + 15x + 45$

2) $12m^6n - 4mn^3 + 20mn$

Factor each completely.

3) $x^2 + 2x - 8$

4) $a^2 - 6a - 7$

 5) $a^2 + 16a + 60$

6) $n^2 - 13n + 40$

7) $5n^2 + 26n + 5$

8) $5n^2 - 17n - 12$

9) $5k^2 + 8k + 3$

10) $5n^2 - 24n + 16$

$$11) 4n^2 + 15n - 4$$

$$12) 4x^2 - 5x - 6$$



$$13) 4k^2 - 19k + 12$$

$$14) 4x^2 - 17x + 4$$

$$15) 8r^2 - 8r - 70$$

$$16) 4k^2 - 18k - 70$$



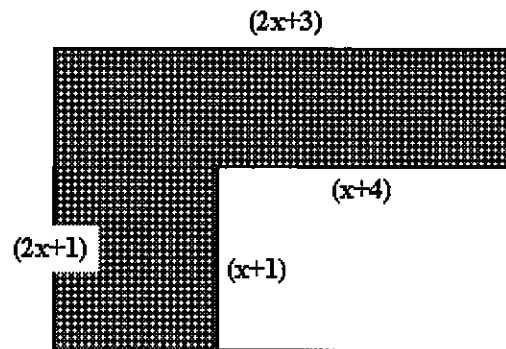
$$17) n^2 - 4$$

$$18) 25n^2 - 16$$

$$19) 27x^2 - 48$$



20. Find the shaded area.



Factoring

Factor the common factor out of each expression.

1) $25x^2 + 15x + 45$
 $5(5x^2 + 3x + 9)$

2) $12m^6n - 4mn^3 + 20mn$
 $4mn(3m^5 - n^2 + 5)$

Factor each completely.

3) $x^2 + 2x - 8$
 $(x - 2)(x + 4)$

4) $a^2 - 6a - 7$
 $(a - 7)(a + 1)$

5) $a^2 + 16a + 60$
 $(a + 6)(a + 10)$

6) $n^2 - 13n + 40$
 $(n - 5)(n - 8)$

7) $5n^2 + 26n + 5$
 $(5n + 1)(n + 5)$

8) $5n^2 - 17n - 12$
 $(5n + 3)(n - 4)$

9) $5k^2 + 8k + 3$
 $(5k + 3)(k + 1)$

10) $5n^2 - 24n + 16$
 $(5n - 4)(n - 4)$

11) $4n^2 + 15n - 4$
 $(n + 4)(4n - 1)$

12) $4x^2 - 5x - 6$
 $(x - 2)(4x + 3)$

13) $4k^2 - 19k + 12$
 $(k - 4)(4k - 3)$

14) $4x^2 - 17x + 4$
 $(x - 4)(4x - 1)$

15) $8r^2 - 8r - 70$
 $2(2r - 7)(2r + 5)$

16) $4k^2 - 18k - 70$
 $2(2k + 5)(k - 7)$

17) $n^2 - 4$
 $(n + 2)(n - 2)$

18) $25n^2 - 16$
 $(5n + 4)(5n - 4)$

19) $27x^2 - 48$
 $3(3x + 4)(3x - 4)$