Math 2   Name_____

Math 2 Unit 2.6 Examples of Factoring (leading coefficient is not prime) and has GCF

Factor each completely.

1) $30p^2 - 51p - 189$

2) $18r^2 - 152r + 64$

3) $20n^2 + 114n + 108$

4) $12v^2 + 94v - 16$

5) $36k^2 + 60k - 200$

6) $20n^2 + 22n + 6$

7) $36b^2 + 36b - 16$

8) $50k^2 + 115k + 60$

9) $27k^2 + 114k + 24$

10) $45x^2 - 200x + 80$

11) $54a^2 - 330ab + 300b^2$

12) $54u^2 - 306uv + 420v^2$

13) $18x^2 + 96xy + 128y^2$

14) $12m^2 + 34mn - 28n^2$

15) $32a^2 - 68ab + 8b^2$

16) $36u^2 + 344uv - 160v^2$

17) $27x^2 - 57xy + 6y^2$

18) $27x^2 - 126xy + 147y^2$

19) $36m^2 + 30mn - 336n^2$

20) $30x^2 - 25xy - 70y^2$

Math 2   Name_____
Math 2 Unit 2.6 Examples of Factoring (leading coefficient is not prime) and has GCF

Factor each completely.

1) $30p^2 - 51p - 189$

$3(5p + 9)(2p - 7)$

2) $18r^2 - 152r + 64$

$2(r - 8)(9r - 4)$

3) $20n^2 + 114n + 108$

$2(2n + 9)(5n + 6)$

4) $12v^2 + 94v - 16$

$2(v + 8)(6v - 1)$

5) $36k^2 + 60k - 200$

$4(3k + 10)(3k - 5)$

6) $20n^2 + 22n + 6$

$2(2n + 1)(5n + 3)$

7) $36b^2 + 36b - 16$

$4(3b - 1)(3b + 4)$

8) $50k^2 + 115k + 60$

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

9) $27k^2 + 114k + 24$

$3(k + 4)(9k + 2)$

10) $45x^2 - 200x + 80$

$5(x - 4)(9x - 4)$

11) $54a^2 - 330ab + 300b^2$

$6(a - 5b)(9a - 10b)$

12) $54u^2 - 306uv + 420v^2$

$6(3u - 7v)(3u - 10v)$

13) $18x^2 + 96xy + 128y^2$

$2(3x + 8y)^2$

14) $12m^2 + 34mn - 28n^2$

$2(2m + 7n)(3m - 2n)$

15) $32a^2 - 68ab + 8b^2$

$4(a - 2b)(8a - b)$

16) $36u^2 + 344uv - 160v^2$

$4(u + 10v)(9u - 4v)$

17) $27x^2 - 57xy + 6y^2$

$3(x - 2y)(9x - y)$

18) $27x^2 - 126xy + 147y^2$

$3(3x - 7y)^2$

19) $36m^2 + 30mn - 336n^2$

$6(2m + 7n)(3m - 8n)$

20) $30x^2 - 25xy - 70y^2$

$5(x - 2y)(6x + 7y)$