Name_____

Math 2 Unit 2.4 Examples of Factoring (leading coefficient is prime)

Factor each completely.

1) $3x^2 - 31x + 10$

2) $7x^2 - 76x + 60$

3) $3n^2 - 19n + 28$

4) $5x^2 + 56x + 60$

5) $3b^2 - 2b - 40$

6) $3b^2 + 11b - 42$

7) $5n^2 + 17n + 6$

8) $3x^2 + 22x - 80$

9) $7n^2 + 18n - 40$

10) $7n^2 + 65n + 72$

11) $7x^2 + 50xy - 48y^2$

12) $7u^2 + 39uv + 20v^2$

13) $3u^2 - 37uv + 90v^2$

14) $2x^2 + 7xy + 6y^2$

15) $5m^2 - 13mn + 6n^2$

16) $7x^2 + 68xy - 20y^2$

17) $5m^2 - 49mn - 10n^2$

18) $3m^2 - 34mn + 80n^2$

19) $7x^2 - 27xy - 40y^2$

20) $2x^2 + 7xy - 4y^2$

Math 2   Name_____
Math 2 Unit 2.4 Examples of Factoring (leading coefficient is prime)

Factor each completely.

1) $3x^2 - 31x + 10$

$(3x - 1)(x - 10)$

2) $7x^2 - 76x + 60$

$(7x - 6)(x - 10)$

3) $3n^2 - 19n + 28$

$(3n - 7)(n - 4)$

4) $5x^2 + 56x + 60$

$(5x + 6)(x + 10)$

5) $3b^2 - 2b - 40$

$(3b + 10)(b - 4)$

6) $3b^2 + 11b - 42$

$(3b - 7)(b + 6)$

7) $5n^2 + 17n + 6$

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

8) $3x^2 + 22x - 80$

$(3x - 8)(x + 10)$

9) $7n^2 + 18n - 40$

$(7n - 10)(n + 4)$

10) $7n^2 + 65n + 72$

$(7n + 9)(n + 8)$

11) $7x^2 + 50xy - 48y^2$

$(7x - 6y)(x + 8y)$

12) $7u^2 + 39uv + 20v^2$

$(7u + 4v)(u + 5v)$

13) $3u^2 - 37uv + 90v^2$

$(3u - 10v)(u - 9v)$

14) $2x^2 + 7xy + 6y^2$

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

15) $5m^2 - 13mn + 6n^2$

$(5m - 3n)(m - 2n)$

16) $7x^2 + 68xy - 20y^2$

$(7x - 2y)(x + 10y)$

17) $5m^2 - 49mn - 10n^2$

$(5m + n)(m - 10n)$

18) $3m^2 - 34mn + 80n^2$

$(3m - 10n)(m - 8n)$

19) $7x^2 - 27xy - 40y^2$

$(7x + 8y)(x - 5y)$

20) $2x^2 + 7xy - 4y^2$

$(2x - y)(x + 4y)$