

Math Sheet

Name _____ Score _____ / 10 Teacher _____ Date _____

Factoring Quadratic Polynomials

Factor each polynomial completely over the integers. Write Prime over the integers when it cannot be factored further.

1. $x^2 - 6x$

2. $y^2 - y + 20$

3. $z^2 + 18$

4. $m^2 - 4m$

5. $n^2 + 3n - 40$

6. $p^2 - 25$

7. $x^2 - 10x + 24$

8. $y^2 - 7y + 10$

9. $z^2 - 3z - 4$

10. $m^2 + 8m$

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Factoring Quadratic Polynomials

Answer key

Factor each polynomial completely over the integers. Write Prime over the integers when it cannot be factored further.

1. $x^2 - 6x$

Answer

$x(x - 6)$

2. $y^2 - y + 20$

Prime over the integers.

3. $z^2 + 18$

Prime over the integers.

4. $m^2 - 4m$

Answer

$m(m - 4)$

5. $n^2 + 3n - 40$

Answer

$(n - 5)(n + 8)$

6. $p^2 - 25$

Answer

$(p - 5)(p + 5)$

7. $x^2 - 10x + 24$

Answer

$(x - 4)(x - 6)$

8. $y^2 - 7y + 10$

Answer

$(y - 2)(y - 5)$

9. $z^2 - 3z - 4$

Answer

$(z - 4)(z + 1)$

10. $m^2 + 8m$

Answer

$m(m + 8)$