

- 9.2. $z = x^2 + 2xy - y^2 - 2x + 2y;$
 $D = \{(x, y) | y \leq x + 2, y \geq 0, x \leq 2\}.$
- 9.3. $z = x^2 - 2xy - y^2 + 4x + 1;$
 $D = \{(x, y) | x + y + 1 \leq 0, y \geq 0, x \leq -3\}.$
- 9.4. $z = 4x + 2y + 4x^2 + y^2 + 6;$
 $D = \{(x, y) | x + y + 2 \geq 0, y \leq 0, x \leq 0\}.$
- 9.5. $z = 5x^2 - 3xy + y^2 + 4;$
 $D = \{(x, y) | x + y \leq 1, y \geq -1, x \geq -1\}.$
- 9.6. $z = 4x^2 + 9y^2 - 4x - 6y + 3;$
 $D = \{(x, y) | x + y \leq 1, y \geq 0, x \geq 0\}.$
- 9.7. $z = xy;$
 $D = \{(x, y) | x^2 + y^2 \leq 1\}.$
- 9.8. $z = xy^2;$
 $D = \{(x, y) | x^2 + y^2 \leq 1\}.$
- 9.9. $z = x^2 + y^2 - xy - x - y;$
 $D = \{(x, y) | x + y \leq 3, x \geq 0, y \geq 0\}.$
- 9.10. $z = x^2 + y^2 - xy + x + y - 4;$
 $D = \{(x, y) | |x| + |y| \leq 2\}.$