

MA90 Exercises for section 6.6 Factoring: A General Review**Short Answer**

1. Factor the polynomial completely; that is, once you are finished factoring, none of the factors you obtain should be factorable.

$$3a^3b + 9a^2b + 3ab$$

2. Factor the polynomial completely; that is, once you are finished factoring, none of the factors you obtain should be factorable.

$$3x^2 - 18x + 27$$

3. Factor the polynomial completely; that is, once you are finished factoring, none of the factors you obtain should be factorable.

$$64x^2 - 112xy + 49y^2$$

Name: _____

ID: A

4. Factor the polynomial completely; that is, once you are finished factoring, none of the factors you obtain should be factorable.

$$2a^3b^2 + 10a^2b^2 + 2ab^2$$

5. Factor the polynomial completely; that is, once you are finished factoring, none of the factors you obtain should be factorable.

$$a^{10} + 25a^4b^4$$

6. Factor the polynomial completely; that is, once you are finished factoring, none of the factors you obtain should be factorable.

$$192a^4b - 3a^2b$$

7. Factor the polynomial completely; that is, once you are finished factoring, none of the factors you obtain should be factorable.

$$y^4 - 16$$

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8. Factor the polynomial completely; that is, once you are finished factoring, none of the factors you obtain should be factorable.

$$18x^2 - 25x + 8$$

9. Factor the polynomial completely; that is, once you are finished factoring, none of the factors you obtain should be factorable.

$$x^2 - 36$$

10. Factor the polynomial completely; that is, once you are finished factoring, none of the factors you obtain should be factorable.

$$5x^2 + 27xy - 74y^2$$

11. Factor the polynomial completely; that is, once you are finished factoring, none of the factors you obtain should be factorable.

$$12x^2 + 12x - 1$$

12. Factor the polynomial completely; that is, once you are finished factoring, none of the factors you obtain should be factorable.

$$4x^2 + 3x - 22$$

13. Factor the polynomial completely; that is, once you are finished factoring, none of the factors you obtain should be factorable.

$$49x^2 + 64y^2$$

14. Factor the polynomial completely; that is, once you are finished factoring, none of the factors you obtain should be factorable.

$$x^2 + 2x + bx + 2b$$

15. Factor the polynomial completely; that is, once you are finished factoring, none of the factors you obtain should be factorable.

$$rk - ry + kx - yx$$

**MA90 Exercises for section 6.6 Factoring: A General Review
Answer Section****SHORT ANSWER**

1. ANS:

$$3a \cdot b \cdot (a^2 + 3a + 1)$$

PTS: 1

2. ANS:

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

PTS: 1

3. ANS:

$$(8x - 7y)^2$$

PTS: 1

4. ANS:

$$2a \cdot b^2 \cdot (a^2 + 5a + 1)$$

PTS: 1

5. ANS:

$$a^4 \cdot (a^6 + 25b^4)$$

PTS: 1

6. ANS:

$$3a^2 \cdot b \cdot (8a - 1) \cdot (8a + 1)$$

PTS: 1

7. ANS:

$$(y^2 + 4) \cdot (y + 2) \cdot (y - 2)$$

PTS: 1

8. ANS:

$$(2x - 1) \cdot (9x - 8)$$

PTS: 1

9. ANS:

$$(x - 6) \cdot (x + 6)$$

PTS: 1

10. ANS:

$$(5x + 37y) \cdot (x - 2y)$$

PTS: 1

11. ANS:

prime

PTS: 1

12. ANS:

$$(4x + 11) \cdot (x - 2)$$

PTS: 1

13. ANS:

prime

PTS: 1

14. ANS:

$$(x + b) \cdot (x + 2)$$

PTS: 1

15. ANS:

$$(r + x) \cdot (k - y)$$

PTS: 1