

Lesson 5.4 Worksheet

Name: _____

Monomial Factors: Factor the polynomial completely.

1.) $80b^3 - 54b^2$

2.) $c^3 + 9c^2 + 18c$

3.) $3y^5 - 48y^3$

4.) $54m^5 + 18m^4 + 9m^3$

Sum or Difference of Cubes: Factor the polynomial completely.

5.) $x^3 + 8$

6.) $y^3 - 64$

7.) $125n^3 + 216$

8.) $-5z^3 + 320$

Factor By Grouping: Factor the polynomial completely.

9.) $y^3 - 7y^2 + 4y - 28$

10.) $25a^3 - 100a^2 - a + 4$

Quadratic Form: Factor the polynomial completely.

11.) $32z^5 - 2z$

12.) $3x^4 - x^2 - 24$

Solving Equations: Find the real-number solutions of the equation.

13.) $18x^3 = 50x$

14.) $m^3 + 6m^2 - 4m - 24 = 0$

Choose a Method: Factor the polynomial completely.

15.) $-4b^4 - 500b$

16.) $18c^4 + 57c^3 - 10c^2$

Find the possible value(s) of x .

17.) Volume = 40

