

Algebra 1
8.5 Practice

Name Key

Factor the GCF out of each expression if possible.

1. $6x^3 + 18x^2$

$$6x^2(x+3)$$

2. $3c^3 - 12c$

$$3c(c^2 - 4)$$

3. $-10m^3 - 2m$

$$\begin{aligned} & -2m(5m^2 + 1) \\ & \text{or} \\ & 2m(-5m^2 - 1) \end{aligned}$$

4. $35a^3 - 28a^2$

$$7a^2(5a - 4)$$

5. $32x - 48x^2$

$$16x(2 - 3x)$$

6. $35xy - 60x^2$

$$5x(7y - 12x)$$

7. $3m^2 + 24m + 36$

$$3(m^2 + 8m + 12)$$

8. $4x^2 + 4x - 80$

$$4(x^2 + x - 20)$$

9. $2t^3 + 2t^2 - 12t$

$$2t(t^2 + t - 6)$$

10. $6x^3 + 24x^2 + 24x$

$$6x(x^2 + 4x + 4)$$

11. $x^3 + x^2 + 4x + 4$

no
GCF

12. $8d^3 + 16d^2 + 3d + 6$

no
GCF