

Gcf Worksheet

Factor the common factor out of each expression.

1) $6n^7 - 15n^8$

2) $2m^5 + 4m$

3) $-2r^3 - 2r^2$

4) $-3n - 9n^3$

5) $-8x + 4$

6) $-4b + 4$

7) $-8r^3 + 4r$

8) $2n^3 + n^2$

9) $-15x^2 + 10x$

10) $25a^2 - 20a$

11) $4n^8 - 5n^5m - 5n^3$

12) $48 + 54xy + 6xy^2$

13) $30v^5u^3 + 36v^5 + 12v^6$

14) $-36x - 4x^2y^2 - 24xy^3$

15) $2x^2y^2 + 16x^2 + 4$

16) $-24uv^2 + 6u^2 + 48v$

17) $8x^3y^4 + 7x^3y^3 + 4x^5$

18) $24a^2b + 18b - 24$

19) $-16xy^2 - 14x^2 + 12xy$

20) $7x^5y^3 - 21x^2y^4 + 14x^2y^3$

21) $-32b^4 - 32b^3a + 40ba$

22) $-80mn - 72m + 72n$

23) $30yx^4 - 10y^3x + 15y^4$

24) $30x^6y^5 + 50x^5y + 20x^2y$

25) $-70m^{10}n - 21m^8n^2 + 63m^7n^2$

26) $-8x^3y^2 + 16x^4 + 6x^3y$

27) $18m^4n^3 - 27m^2n^2 - 45m^2n$

28) $-10x - 35x^3y^2 + 50y^2$

29) $4u^2 - 4u - 8v$

30) $-18 - 14y^5 + 18xy$

Gcf Worksheet

Factor the common factor out of each expression.

$$1) 6n^7 - 15n^8$$

$$3n^7(2 - 5n)$$

$$3) -2r^3 - 2r^2$$

$$-2r^2(r + 1)$$

$$5) -8x + 4$$

$$4(-2x + 1)$$

$$7) -8r^3 + 4r$$

$$4r(-2r^2 + 1)$$

$$9) -15x^2 + 10x$$

$$5x(-3x + 2)$$

$$11) 4n^8 - 5n^5m - 5n^3$$

$$n^3(4n^5 - 5mn^2 - 5)$$

$$13) 30v^5u^3 + 36v^5 + 12v^6$$

$$6v^5(5u^3 + 6 + 2v)$$

$$15) 2x^2y^2 + 16x^2 + 4$$

$$2(x^2y^2 + 8x^2 + 2)$$

$$17) 8x^3y^4 + 7x^3y^3 + 4x^5$$

$$x^3(8y^4 + 7y^3 + 4x^2)$$

$$19) -16xy^2 - 14x^2 + 12xy$$

$$2x(-8y^2 - 7x + 6y)$$

$$21) -32b^4 - 32b^3a + 40ba$$

$$8b(-4b^3 - 4ab^2 + 5a)$$

$$23) 30yx^4 - 10y^3x + 15y^4$$

$$5y(6x^4 - 2xy^2 + 3y^3)$$

$$25) -70m^{10}n - 21m^8n^2 + 63m^7n^2$$

$$7m^7n(-10m^3 - 3mn + 9n)$$

$$27) 18m^4n^3 - 27m^2n^2 - 45m^2n$$

$$9m^2n(2m^2n^2 - 3n - 5)$$

$$29) 4u^2 - 4u - 8v$$

$$4(u^2 - u - 2v)$$

$$2) 2m^5 + 4m$$

$$2m(m^4 + 2)$$

$$4) -3n - 9n^3$$

$$-3n(1 + 3n^2)$$

$$6) -4b + 4$$

$$4(-b + 1)$$

$$8) 2n^3 + n^2$$

$$n^2(2n + 1)$$

$$10) 25a^2 - 20a$$

$$5a(5a - 4)$$

$$12) 48 + 54xy + 6xy^2$$

$$6(8 + 9xy + xy^2)$$

$$14) -36x - 4x^2y^2 - 24xy^3$$

$$-4x(9 + xy^2 + 6y^3)$$

$$16) -24uv^2 + 6u^2 + 48v$$

$$6(-4uv^2 + u^2 + 8v)$$

$$18) 24a^2b + 18b - 24$$

$$6(4a^2b + 3b - 4)$$

$$20) 7x^5y^3 - 21x^2y^4 + 14x^2y^3$$

$$7x^2y^3(x^3 - 3y + 2)$$

$$22) -80mn - 72m + 72n$$

$$8(-10mn - 9m + 9n)$$

$$24) 30x^6y^5 + 50x^5y + 20x^2y$$

$$10x^2y(3x^4y^4 + 5x^3 + 2)$$

$$26) -8x^3y^2 + 16x^4 + 6x^3y$$

$$2x^3(-4y^2 + 8x + 3y)$$

$$28) -10x - 35x^3y^2 + 50y^2$$

$$5(-2x - 7x^3y^2 + 10y^2)$$

$$30) -18 - 14y^5 + 18xy$$

$$2(-9 - 7y^5 + 9xy)$$