

Section 6.9

Oct. 19

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Dividing Monomials

$$1. \quad \frac{6x}{3} = 2x$$

$$7. \quad \frac{12x^1}{4x^1} = 3 \quad \text{or} \quad \frac{12x^1}{3x^1} = 4x^0 = 4$$

$$22. \quad \frac{9amn}{amn} = 9$$

$$41. \frac{-16m^8n^3}{4m^7n^3} = -4/m$$

$$2. \frac{-15a}{5} = -3a$$

$$3. \frac{24y}{8} = 3y$$

$$4. \frac{36m}{9} = 4m$$

$$5. \frac{-30x-5x}{6} = -5x$$

$$6. \frac{-25y}{5} = -5y$$

$$8. \frac{-18y}{3y} = -6$$



$$9. \frac{24a}{24a} = 1$$

$$10. \frac{-32b}{-b} = 32$$

$$11. \frac{-40x}{1x} = -40$$

$$12. \frac{-32m}{8} = -4m$$

$$14. \frac{-18ab}{6a} = -3b$$

$$15. \frac{12pqr}{4pqr} = 3$$

$$20. \quad 22ab \div 11ab$$

$$= \frac{22ab}{11ab}$$

$$= 2$$

$$35. \quad \frac{-12m^6n^2}{4m^3n^2}$$

$$= -3m^3$$

$$22. \quad 9amr \div amr$$

$$= 9$$

$$45a \quad A = xy$$

$$l = y$$

$$w = \frac{xy}{y}$$

$$= x$$

$$46a \quad a = 160$$

$$A = 40x^2y^2$$

$$w = 5xy =$$

$$l = A \div w$$

$$= \frac{40x^2y^2}{5xy}$$

$$= 8xy$$

Dividing Polynomials by Monomials

$$1. \quad \frac{12xy}{4xy} = 3$$

$$5. \quad \frac{11ab}{ab} = 11$$

$$9. \quad \frac{36x^3y^2}{-6x^2y^2} = -6x$$

10.
$$\frac{12xy - 15y^2 + 24y}{3y}$$

$$= \frac{12xy}{3y} - \frac{15y^2}{3y} + \frac{24y}{3y}$$

$$= 4x - 5y + 8$$

$$13. \quad \frac{4m^3 + 8m^2 - 12m}{4m}$$

$$= m^2 + 2m - 3$$

$$14. \quad \frac{9x^3 - 24x^2 - 15x}{-3x}$$

$$= -3x^2 + 8x + 5$$

$$17. \quad \frac{-21m^2 + 14m^3 - 21m^4}{-7m^2}$$

$$3 - 2m + 3m^2$$

$$20. \quad \frac{-20x^3yz + 30x^2y^2z - 40xy^3z}{-10xyz}$$

$$= 2x^2 - 3xy + 4y^2$$

$$23. \quad \frac{30m^3n^5 - 36m^4n^4 - 30m^5n^3}{6m^3n^3}$$

$$= 5n^2 - 6mn - 5m^2$$

Extra.

$$\frac{40x^0y^3 + 20x^1y^5 - 10x^7y^3}{-5x^5y^5}$$

$$= -8x^{-5}y^{-2} - 4x^{-4} + 2x^2y^{-2}$$

$$25 \text{ a) } A = 16x^2 + 4x$$

$$l = 4x$$

$$w = ?$$

$$A = lw$$

$$w = \frac{A}{l} \\ = \frac{16x^2 + 4x}{4x}$$

$$= 4x + 1$$

$$25 \text{ c) } A = 6x^2y^2 - 12xy + 14x^2y$$

$$w = 2xy$$

$$l = ?$$

$$A = lw$$

$$l = \frac{A}{w}$$

$$= \frac{6x^2y^2 - 12xy + 14x^2y}{2xy}$$

$$= 3xy - 6 + 7x$$

Homework:

p 324: 16, 17, 18, 23, 26, 28, 31,
32, 34, 37, 38, 42, 44,
45 b

Piachire (or sheet)

3, 7, 8, 11, 12, 15, 18, 19, 21.
22, 24, 25 b, c

