

WS 6.4A - Dividing a Polynomial by a Monomial

Date _____ Period _____

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Divide.

1) $(2n^3 + 8n^2 + 12n) \div 4n$

2) $(24x^4 + 12x^3 + 6x^2) \div 6x$

3) $(k^3 + 6k^2 + 2k) \div 6k^2$

4) $(3p^3 + 4p^2 + 2p) \div 4p^2$

5) $(8x^4 + 16x^3 + 24x^2) \div 8x^2$

6) $(4n^4 + 12n^3 + 2n^2) \div 4n^2$

7) $(2m^3 + 2m^2 + 24m) \div 8m^2$

8) $(8r^3 + 2r^2 + 32r) \div 8r^2$

9) $(24x^5 + 4x^4 + x^3) \div 8x^3$

10) $(24n^5 + 4n^4 + 32n^3) \div 8n^3$

11) $(18b^3 + 3b^2 + 3b) \div 6b^3$

12) $(v^8 + 12v^7 + 2v^6) \div 4v^3$

13) $(2x^3 + 2x^2 + 2x) \div 6x^3$

14) $(4n^5 + 4n^4 + 16n^3) \div 4n^3$

Answers to WS 6.4A - Dividing a Polynomial by a Monomial (ID: 1)

$$1) \frac{n^2}{2} + 2n + 3$$

$$5) x^2 + 2x + 3$$

$$9) 3x^2 + \frac{x}{2} + \frac{1}{8}$$

$$13) \frac{1}{3} + \frac{1}{3x} + \frac{1}{3x^2}$$

$$2) 4x^3 + 2x^2 + x$$

$$6) n^2 + 3n + \frac{1}{2}$$

$$10) 3n^2 + \frac{n}{2} + 4$$

$$14) n^2 + n + 4$$

$$3) \frac{k}{6} + 1 + \frac{1}{3k}$$

$$7) \frac{m}{4} + \frac{1}{4} + \frac{3}{m}$$

$$11) 3 + \frac{1}{2b} + \frac{1}{2b^2}$$

$$4) \frac{3p}{4} + 1 + \frac{1}{2p}$$

$$8) r + \frac{1}{4} + \frac{4}{r}$$

$$12) \frac{v^5}{4} + 3v^4 + \frac{v^3}{2}$$