

20.10.15

Algebra

$$(a^2)(a^3) = a^5$$

Multiplying Monomials
Section 6.6
Pg. 316-317

Classwork: p. 317: 1-12, 13, 14, 15, 16, 22, 23, 24, 28, 30, 32, 38, 40, 44, 47a
Homework: p. 317: 17-21, 25, 26, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47c, 48

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Multiply.

1. $4x \times 2x = 8x^2$

4. $5x \times 3y = 15xy$

7. $4a \times 6b = 24ab$

10. $4b \times 3c = 12bc$

2. $2y \times 5y = 10y^2$

5. $2m \times 3n = 6mn$

8. $3x^2 \times 2y = 6x^2y$

11. $3a \times 2b^2 = 6ab^2$

3. $1n \times 8n = 8n^2$

6. $5s \times 7t = 35st$

9. $4a \times 5b^2 = 20ab^2$

12. $6s \times 3t = 18st$

Multiply.

13. $(3x)(2y) = 6xy$

16. $(5ab)(3c) = 15abc$

Multiply.

22. $(3x^2)(-5y^2) = -15x^2y^2$ 23. $-2t^3(-4a) = 8at^3$

24. $(6ab)(-2c^2) = -12abc^2$ 25. $-8a^2(3y^2)$

Multiply.

$$28. (-2xy)(-7xy) = 14x^2y^2$$

$$30. 4s^2t^3(-3st) = -12s^3t^4$$

$$32. -2s^2t^3(-5s^4t^2) = 10s^6t^5$$

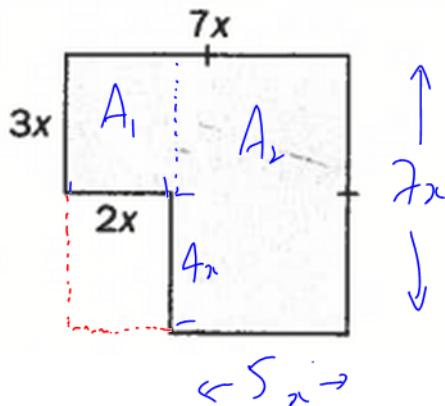
$$38. -5x(-7y)(-2z) = -70xyz$$

$$40. (4a^2x^3z)(-2x^3y^2z^2) = -8a^2x^6y^2z^3$$

$$44. (-x^2yz)(2xy^2z)(-2xyz^2) = 4x^4y^4z^4$$

(47) Measurement Find the area of each figure.

a)



$$\begin{aligned} A &= (7x)(7x) - (2x)(4x) \\ &= 49x^2 - 8x^2 \\ &= 41x^2 \end{aligned}$$

$$\begin{aligned} A &= A_1 + A_2 \\ &= (3x)(2x) + (5x)(7x) \\ &= 6x^2 + 35x^2 = 41x^2 \end{aligned}$$

$\therefore$ The area is $41x^2 \text{ (units)}^2$