11-3A Lesson Master

SKILLS Objective B

In 1–8, simplify.

1. \(4x(2x)\)

2. \(3(x + 5)\)

3. \(4x(2 + x)\)

4. \(2y(3y^2 + 10y - 6)\)

5. \(0.2m^4(m^5 - 3)\)

6. \(-\frac{1}{4}ab(a^2 - 6ab + 9)\)

7. \(n(2n + 9) - 6(n - 1)\)

8. \(x(2a + 1) + 6a(-x + 9)\)

In 9–12, fill in the blank.

9. \(2(x + ___) = 2x + 18\)

10. \(6n(___ + 9) = 24n^2 + 54n\)

11. \(x^2(x^2 + ___) = x^4 + x^2y\)

12. \(___ (2y + 7) = -6y - 21\)

REPRESENTATIONS Objective I

In 13 and 14, a large rectangle is shown.

a. Express its area as the sum of smaller areas.

b. Express its area as length \(\times\) width.

c. What equality is shown?

13. 

\[
\begin{array}{ccc}
    x & x & 1 \\
    x & & 1 \\
\end{array}
\]

14. 

\[
\begin{array}{cccc}
    x & x & 1 & 1 \\
    x & & 1 & 1 \\
\end{array}
\]

a. 

b. 

c. 

a. 

b. 

c. 