

SM2-A HW #7-6 (Review exponents, radicals, and Polynomials)

Simplify each difference.

1) $(4 - 4x) - (8x - 7)$

2) $(3m^2 - 7m^3) - (m^3 - 8m^2)$

Find each product.

3) $7n^2(2n + 2)$

4) $3(4x - 1)$

5) $(7m - 3)(m - 3)$

6) $(5x - 8)^2$

7) Rewrite in Exponent Form:

$$(\sqrt[5]{3k})^2$$

8) Rewrite in radical form.

$$(5k)^{\frac{5}{4}}$$

Simplify. Your answer should contain only positive exponents.

9) $2x^{-3} \cdot 4yx^{-1}$

10) $a^{-1} \cdot 2a^2b^3$

Simplify.

11) $(4xy^3)^3$

12) $(3a^2b^2)^4$

13) $-3\sqrt{6} + 3\sqrt{24}$

14) $-\sqrt{8} - \sqrt{2}$

15) $\sqrt{2}(3 + \sqrt{2})$

16) $\sqrt{200x^4y}$

17) $\frac{\sqrt{3}}{3\sqrt{12}}$

18) $\frac{\sqrt{15}}{2\sqrt{20}}$

Simplify. Your answer should contain only positive exponents.

19) $\frac{3m^4n^4}{m^3}$

20) $\frac{4y^{-3}}{x^2y^3}$