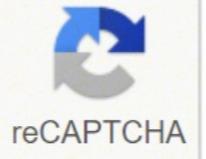




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Rational expressions kuta software answers

Name _____ Date _____ Period _____

Properties of Exponents

Simplify. Your answer should contain only positive exponents.

1) $2m^2 \cdot 2m^3 = \frac{4}{m} m^5$

2) $m^6 \cdot 2m^2 = 2m^8$

3) $4x^3 \cdot 2x^2 = \frac{8}{x} x^5$

4) $4x^2 \cdot 2x^3 = 8x^5$

5) $2x^2 \cdot 3x = 6x^3$

6) $4x^3 \cdot 2x^4 = 4\sqrt{x^8}$

7) $6x^2 \cdot 3x^3 \cdot 5x^4 = \frac{12}{x} x^9$

8) $x^2 \cdot x^3 \cdot x^4 = \frac{x^9}{y} x^5$

9) $(x^2)^3 = 1$

10) $(2x)^3 = \frac{1}{16} x^3$

11) $(w^2)^3 = 256$

12) $(w^2)^3 = 16w^6$

13) $(w^2)^3 = 81k^6$

14) $(6xy)^3 = \frac{1}{4} xy^9$

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Kuta Software - Infinite Algebra 2

Introduction to Sequences

Find the next three terms in each sequence.

1) 1, -3, 9, -27, 81, ...

2) 9, 109, 209, 309, 409, ...

3) 0, 3, 8, 15, 24, ...

4) $\frac{1}{2}, \frac{1}{2}, \frac{3}{8}, \frac{1}{4}, \frac{5}{32}, \dots$

5) 4, 16, 36, 64, 100, ...

6) 14, 34, 54, 74, 94, ...

7) $5, \frac{5}{2}, \frac{5}{4}, \frac{5}{8}, \frac{5}{16}, \dots$

8) -9, 101, -999, 10001, -99999, ...

Find the tenth term in each sequence.

9) $-1, \frac{2}{3}, \frac{2}{3}, 4, \frac{17}{3}, \dots$

10) 7, 9, 12, 16, 21, ...

11) -2, -6, -18, -54, -162, ...

12) -23, -18, -13, -8, -3, ...

13) -4, 12, -36, 108, -324, ...

14) -6, -2, 0, 1, $\frac{3}{2}, \dots$

15) -28, 172, 372, 572, 772, ...

16) 37, 46, 55, 64, 73, ...

Find the first four terms in each sequence.

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

18) $a_n = 3^{n-1}$

19) $a_n = n^2 + 1$

20) $a_n = \frac{n^2}{2n+1}$

-1-

Algebra 1 Name _____ Date _____ Period _____

Simplifying Radicals with Variables

Simplify.

1) $\sqrt{16x^2}$

2) $\sqrt{16x^4}$

3) $\sqrt{25x^2}$

4) $\sqrt{25x^2}$

5) $\sqrt{96x^2}$

6) $\sqrt{96x^2}$

7) $\sqrt{16x^2}$

8) $\sqrt{16x^2}$

9) $\sqrt{96x^2}$

10) $\sqrt{16x^2}$

11) $\sqrt{96x^2}$

12) $\sqrt{75x^2}$

13) $\sqrt{16x^2}$

14) $\sqrt{16x^2}$

15) $\sqrt{96x^2}$

16) $\sqrt{96x^2}$

17) $\sqrt{96x^2}$

18) $\sqrt{27x^2}$

19) $\sqrt{16x^2}$

20) $\sqrt{16x^2}$

21) $\sqrt{125x^2}$

22) $\sqrt{125x^2}$

23) $\sqrt{125x^2}$

24) $\sqrt{16x^2}$

25) $\sqrt{125x^2}$

26) $\sqrt{16x^2}$

Circuit Training – Factoring		Name _____
Begin in the top left cell marked #1. Factor the polynomial, then go clockwise in the circuit, hunt for and of the factors in a different cell. Label that cell #2, and factor that polynomial. Continue in this manner until you complete the circuit. Your teacher will consider the circuit complete if and only if you have the correct numbering and the correct factors in each cell. 10		
Ans: $2x + 5$ #1. Factor: $x^2 - 4x^2$	Ans: $2x + 1$ # _____ Factor: $4x^2 - 4x$	
Ans: $x + 5$ # _____ Factor: $x^2 - 15x + 40$	Ans: $x + 5$ # _____ Factor: $x^2 + 14x + 40$	
Ans: $4x - 3$ # _____ Factor: $4x^2 - x^2$	Ans: $x + 3$ # _____ Factor: $x^2 - 4x^2$	
Ans: $1 - 4x$ # _____ Factor: $16x^2y - 8xy$	Ans: prime # _____ $58x^2 - 62x$	
Ans: $x + 15$ # _____ Factor: $x^2 - 2x + 1$	Ans: $x - 35$ # _____ Factor: $2x^2 + 23x + 11$	

Kuta software infinite algebra 2 adding/subtracting rational expressions answers. Kuta software infinite algebra 1 adding and subtracting rational expressions answers. Kuta software infinite algebra 1 dividing rational expressions answers. Multiplying and dividing rational expressions kuta software answers. Simplifying rational expressions kuta software answers.